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JUN 11 1946

# AGRICULTURAL HISTORY

Volume 20



Number 2

April 1946

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Published Quarterly

by

THE AGRICULTURAL HISTORY SOCIETY

# AGRICULTURAL HISTORY

Published Quarterly by the Agricultural History Society

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*Agricultural History* is designed as a medium for the publication of research and documents pertaining to the history of agriculture in all its phases and as a clearing house for information of interest and value to workers in the field. Materials on the history of agriculture in all countries are included, and also materials on institutions, organizations, and sciences which have been factors in agricultural development. The Agricultural History Society assumes no responsibility for statements, whether of fact or of opinion, made by contributors.

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Correspondence concerning contributions, books for review, and back numbers may be sent to Everett E. Edwards, editor, Agricultural History Society, Room 3901, South Agriculture Building, Washington 25, D. C.; correspondence concerning membership dues and business matters to the secretary-treasurer, Charles A. Burmeister, at the same address.

Entered as second-class matter, October 12, 1928, at the post office at Baltimore, Maryland, under the Act of March 3, 1879.

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## THE WESTERN MIDDLE WEST, 1900-1914

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If Americans were obliged to select a "heartland" for the United States, most of them undoubtedly would point on their maps to the twelve States of the Middle West, or as the census maps have it, the North Central States. Here lie the five States of the Old Northwest—Ohio, Indiana, Michigan, Illinois, and Wisconsin—and beyond them in two neatly arranged tiers six more—Minnesota, Iowa, and Missouri in the first tier, and the Dakotas, Nebraska, and Kansas in the second. All of these States are far distant from the seas, they are heavily populated, except on their western and northern fringes, by the most "typical" of Americans, and they are capable of almost unlimited development, both agricultural and industrial. The exploitation of their riches is, indeed, already far along. On one census map after another, throughout the later nineteenth century and on down into the twentieth, the areas shaded to show acreage under cultivation, or crops harvested, or the production of wheat, or corn, or cattle, or swine, or dairy products reveal clearly the dominant role this region has played, and continues to play, in the production of food. Here, too, lie the Nation's richest deposits of iron ore and some of its richest coal fields. And into this sheltered haven industry also has marched with ever-increasing tempo. Probably no other like-sized area could be found in all the world so capable of taking care of all its major needs so well.

It seems clear, however, that a distinction should be made between the eastern and the western Middle West. Exactly where the line of cleavage should be drawn to separate the two might well occasion considerable debate, but most observers would agree that the western Middle West lies wholly to the west of Chicago. One can even mark out here a certain geographic unity. While originally heavily timbered to the north and considerably less so to the south, this territory contained practically all the rich but treeless prairies, land at first spurned by the pioneers, but later recognized as ideal for agriculture. Once the breaking plows had done their work, these great flat or rolling stretches offered a minimum of resis-

tance to the farmers' will. Around the borders, nature was not quite so kind. In northern Wisconsin and Minnesota the cut-over tracts left by the lumbermen were often sandy and barren. West of the one-hundredth meridian the rainfall was usually inadequate to insure crops without resort to irrigation. Down in southern Missouri the Ozarks set expansive limits to what the farmer could do. Thus the political and the geographic borders of the region do not precisely coincide, but the unity is there none the less.

The manner in which most of this western Middle West was opened to settlement offers yet another clue to its separateness. Except for the relatively small areas immediately bordering on the rivers or the lakes, its population grew as its railroad network grew. Most of the eastern Middle West was fairly well settled before the railroads appeared, but in the western Middle West, the exact reverse was true. To be sure, parts of Illinois, southern Wisconsin, eastern and central Missouri, and southeastern Iowa had a considerable population in advance of the railroads, but the era of really rapid settlement set in first during the 1850s as the Illinois Central, the Chicago and Northwestern, the Chicago and Rock Island, the Burlington and Missouri River, the Hannibal and St. Joseph, and a host of minor lines began to penetrate where water routes were too far distant for easy use. These and other railroads, helped along in most instances by Federal grants of public land turned over to the States for the purpose, built even more feverishly after the Civil War, while great transcontinentals, aided by land subsidies direct from the United States, pushed their railheads ever farther and farther west. The western Middle West was thus from its infancy conditioned to railroads. Without them and the markets they opened up, its settlement would have been long delayed and in some portions could hardly have occurred at all.

Another factor tending to emphasize the difference between the eastern and the western Middle West was, and to some extent still is, the degree of industrialization to which each has attained.

West of Chicago one finds few really large cities, and agriculture almost everywhere seems dominant. Except for Illinois, where Chicago heavily overweights the scales, more people in every State of this region, as late as the census of 1920, still lived in the country, or in country towns and villages, than in the city.<sup>1</sup> In the older Middle West as in Illinois, the exact reverse was true. If Chicago and the industrial district surrounding it could only be thrown with the eastern Middle West and the rest of Illinois with the western Middle West, the case for the predominantly rural character of the latter region would be complete. Similarly, the eastern Middle West quite outdid the western Middle West in the number and size of its factories. It is true that what is sometimes known as the second mill zone reached as far west as Saint Louis and Minneapolis,<sup>2</sup> but the greater proportion of the region's factories are bracketed by Chicago and Pittsburgh; except for a comparatively few remote outposts, the "black belt" of the manufacturing world leaves off a few miles to the west of Lake Michigan. And, if it makes any difference, a good share of the western outposts of the factory system exist to process foodstuffs or, perchance, to manufacture farm machinery.

There is yet another way in which the western Middle West has established its right to be considered a separate regional entity. Here numerous agrarian movements of reform have been born, here they have lived out their short spans of life, and here they have died. The western Middle West has behind it a long history of agricultural discontent. In the seventies the Grangers, cherishing a grievance against all monopolies in general but against the railroads in particular, captured legislative control of Illinois, Wisconsin, Iowa, and Minnesota and wrote into statute law their doctrine that the States might regulate railroad rates, even to the extent of fixing maximum charges. Following the Grangers came the Greenbackers, whose money reforms attracted followers in every section, but nowhere to quite the extent registered in the western Middle West. In the National election of 1876 Greenback presidential candidates polled over 54 percent of their popular votes in the States of the

western Middle West, then only seven in number, and not thickly settled at that. Four years later, with many more States offering Greenback tickets, the proportion was still 41 percent.<sup>3</sup> After the Greenbackers came the Populist revolt. This movement, in its western manifestation, was strongest in the States bordering on the Great Plains, the Dakotas, Nebraska, and Kansas, but it picked up notable followings in both Minnesota and Iowa, and to the latter State it turned in 1892 for a presidential candidate.

In the twentieth century the gusty winds of reform continued to lash the western Middle West. The new crusades rarely struck with equal force in each of the nine States, but there were few periods in which one part or another of the region was not storm tossed. The Wisconsin Idea got off to a good start early in the century. Hard on its heel came the Iowa Idea. Then, during and after the first World War, the Nonpartisan League upset the equanimity of all "right-thinking" people in North Dakota and Minnesota and to a lesser extent in neighboring States. In Congress the Farm Bloc drawing heavily from all the States of the western Middle West, refused to permit the Nation to forget the plight of the farmer. Here McNary-Haugenism originated, and here it found its most ardent supporters. Out of the same soil grew also the Farmer-Labor Party of Minnesota, the Progressive Party of Wisconsin, and many of the agricultural policies of the New Deal. From this region, possibly as a matter of appeasement, came seven of the ten secretaries of agriculture who held office during the twentieth century.

Obviously, anyone who wishes to understand the agricultural discontent of the western Middle West must know something about the way of life that produced it. By 1900 American agriculture was "coming of age"; the era of pioneering was almost over, and each section had begun to realize what it could do best. While "general farming," in which "no one source of income . . . represents so much as 40 per cent of the total value of products of the farm," was common throughout the western Middle West, the tendency lay in the direction of some type of specialized farming particularly suited to the climate, soil, and location of the area concerned.<sup>4</sup> Indeed, the ordinary observer was sur-

<sup>1</sup>U. S. Bureau of the Census, *Statistical Abstract of the United States*, 1943, p. 12. By 1930 Wisconsin and Missouri had joined Illinois as States with a predominantly urban population, although by very slender majorities.

<sup>2</sup>Clifford L. Lord and Elizabeth H. Lord, *Historical Atlas of the United States*, 157 (New York, 1944).

<sup>3</sup>Based on Edward Stanwood, *A History of the Presidency*, 383, 417 (Boston, 1898).

<sup>4</sup>U. S. Bureau of the Census, 15th Census, 1930, *Census of Agriculture, Types of Farming in the United States*, by Foster F. Elliott, 48 (Washington, 1933). Hereafter cited as Elliott, *Types of Farming*.



prised to discover that, in spite of the fact that nearly every farm grew a considerable variety of crops, the one-crop system, with certain modifications, was hardly less in evidence in the western Middle West than among the cotton farmers of the Deep South. In actual practice one of three principal activities absorbed the chief energies of most of the farmers of the western Middle West. Some of them grew corn either to sell directly or to feed and sell as livestock; others devoted themselves mainly to the production of wheat; while still others raised dairy cattle and made their living by selling milk and butter fat. Thus all three types of farmers, in spite of the numerous minor activities characteristic of most of the better farms, depended for their prosperity upon the marketing of a money crop.

The corn belt cuts a wide swath on any crop map of the United States. Centering in Iowa, all of which it includes, it extends westward into eastern Nebraska and southeastern South Dakota, northward into southern Minnesota, southward into northern Missouri, and eastward across northern and central Illinois on into Indiana and Ohio.<sup>5</sup> In general, the corn farmer had much for which to be thankful. He got a larger yield per acre for his labor than any other cereal grower, his crop season was long enough to keep him and his "hands" fully occupied most of the year, he had few problems of storage, and his marketing difficulties were minimum. If he sold his corn directly, he found plenty of nearby purchasers who were ready to take it off his hands in order to feed it to livestock. Less than 20 percent of the corn crop was shipped beyond the borders of the county in which it was raised. If he himself fed cattle or hogs, he was able to "condense" his freights. Ninety percent of the corn crop, according to a common view, should never leave the farm on which it is grown. Every steer could conveniently carry 100 bushels of corn to market, and in the 30 months of his normal life expectancy, he should consume also 2 or 3 acres of grass.<sup>6</sup> Livestock growers could always find plenty to complain about, but the packing houses to which they shipped were relatively close at hand, and, in spite of the toll taken by the railroads and the commission men, profits were reasonably good.

Wheat was produced in many parts of the United States, but the greatest concentration on wheat

growing was found in two large areas of the western Middle West. What came to be known as the hard spring wheat belt centered in North Dakota, but with a formidable extension in every direction—eastward into Minnesota, southward into South Dakota, westward into Montana, and northwest across the American border into the Canadian Northwest. Well to the south of this region lay another wheat-growing area, now commonly called the hard winter wheat belt, with Kansas as the center, and an overflow into Nebraska, Colorado, western Oklahoma, and northern Texas.<sup>7</sup> The growing of wheat had been a favorite frontier occupation, particularly after the thrust of population from the east reached the open prairies. Wheat is a highly concentrated crop, "storeable," "haulable," and "saleable" even under pioneer conditions. Furthermore, wheat culture thrives best on land plentifully supplied with humus, a condition present in most of the Prairie States when the sod was first broken. There, too, the use of large-scale harvesting and threshing machinery was practicable. Pioneer farmers usually grew wheat as long as the soil produced a paying crop, then either moved westward to new prairie lands, or gave up wheat growing for other and more complicated types of agriculture.<sup>8</sup>

As the twentieth century opened the semiarid High Plains were beginning to set boundaries to the westward march of wheat. But a notable discovery had been made. Given modern milling conditions the best bread wheats were not the soft wheats long favored by eastern farmers and millers but the hard wheats of high gluten content that could be produced only in regions of limited rainfall. This discovery, together with the introduction and improvement of turkey red, a variety of Russian hard winter wheat, had much to do with the rapid expansion of the hard winter wheat belt into western Kansas, the Oklahoma panhandle, and northern Texas. As time went on, it became customary in the manufacture of bread flour either to use the hard wheats exclusively or to mix them with the soft winter wheats grown in Missouri, Illinois, and many eastern States. In case of a shortage in the American hard wheat crop, millers sometimes felt obliged to import Canadian hard wheat, despite the tariff.<sup>9</sup>

There was a considerable difference in the meth-

<sup>7</sup>Elliott, *Types of Farming*, 26.

<sup>8</sup>Wallaces' *Farmer*, 33:1179 (Oct. 2, 1908).

<sup>9</sup>James C. Malin, *Winter Wheat in the Golden Belt of Kansas*, 188-209, 254 (Lawrence, Kansas, 1944).

<sup>5</sup>*Ibid.*, 19.

<sup>6</sup>Wallaces' *Farmer* (Des Moines, Iowa), 38:314 (Feb. 21, 1913).

ods by which spring wheat and winter wheat were produced. The spring-wheat grower sowed his grain as early in the spring as he could and then harvested his crop from 100 to 110 days later. Winter wheat was sown in September or October and harvested the following June or July, thus requiring a 10-month season. In general, the winter-wheat growers tended to be better farmers than the spring-wheat growers, but the short work year was common to both. Conceivably, as one writer has put it, the wheat farmer could "put in a crop during a two- or three-week period in the fall or spring and harvest it in a like period during the summer or autumn; leaving at least ten months of the year free for vacation or other pursuits."<sup>10</sup>

The rise of dairy farming in the western Middle West is closely connected with urbanization. As the great new cities began to develop, dairy farming in the adjacent areas began also to grow. The new population meant not only new milk customers, but as time went on it meant also more milk per customer. Educational campaigns changed the food habits of city dwellers and in particular taught them the virtues of the "perfect food," milk. So great was the demand that means of transportation were devised to tap the milk supply a hundred, two hundred, or even three hundred miles from the city markets. In addition to milk for direct consumption, dairy farmers also sold butterfat to local creameries and comparatively small quantities of milk to ice-cream makers, cheese factories, and condenseries.<sup>11</sup>

Proximity to urban centers was only one of the determining factors in the location of dairy farms. The condition of the land mattered far less to the dairy farmer than to the grain grower, for a well-managed dairy farm tended to build up the soil rather than to deplete it. Naturally, therefore, where wheat growing or other types of general farming had robbed the soil of its fertility, dairy farming furnished a reasonable alternative. Rough and worn-out fields could be turned to pasture, and dairy farming produced an ample supply of fertilizer with which to stimulate the

growth of feed drops. But the successful dairy farmer had to be a good farmer, intelligent as well as industrious, and able to keep abreast of the rapid progress that scientific agriculture was making in his specialty.

The greatest concentration of dairy farming in the western Middle West was in Wisconsin, northern Illinois, northwestern Iowa, and central and eastern Minnesota. Nearby lay the markets of Chicago, Milwaukee, Saint Paul, Minneapolis, and numerous lesser cities. The urban influence, however, was less important in determining the location of dairy farms mainly engaged in the production of butterfat. For this purpose some of the heaviest areas of concentration lay at a considerable distance from the large cities. There was, indeed, a considerable amount of dairy farming throughout the entire corn belt and even in the remoter grain-growing areas. It is also worth noting that the farmers of Wisconsin produced the milk that made that State for many decades the chief center of cheese manufacturing in the United States.<sup>12</sup>

The dairy farmer enjoyed certain substantial advantages over the mere grain grower. His work was less seasonal than that of any other farmer and provided employment for himself, his family, and his employees the whole year around. His profits, likewise, were fairly evenly distributed throughout the year, instead of coming in only at crop-marketing time. He had less to fear from high transportation charges, for his products were of small bulk in comparison to their value, and freight rates loomed correspondingly less important. His investment in land was moderate, and the stability of conditions under which he operated tended to make his credit good. What he asked of government mainly was low taxes, protection against substitutes, and aid in the never-ending search for greater production at lower cost.<sup>13</sup>

It must not be forgotten that on most farms, whether in the corn belt, or in one of the chief wheat-growing regions, or in the area chiefly devoted to the dairy industry, there was generally a considerable amount of mixed farming. In the western Middle West almost all varieties of cereal crops such as oats, barley, rye, and buckwheat were

<sup>10</sup>Edwin G. Nourse and associates, *America's Capacity to Produce*, 39 (Washington, 1934); Theodore Saloutos, *Farmer Movements since 1902*, p. 3, unpublished doctoral dissertation, University of Wisconsin, 1940.

<sup>11</sup>Henry E. Alvord, "Dairy Development in the United States," U. S. Dept. of Agriculture, *Yearbook*, 1899, p. 381-402. See also *Wallaces' Farmer*, 33:1251 (Oct. 16, 1908).

<sup>12</sup>Elliott, *Types of Farming*, 44, 54.

<sup>13</sup>Benton H. Wilcox, *A Reconsideration of the Character and Economic Basis of Northwestern Radicalism*, 33, 56, unpublished doctoral dissertation, University of Wisconsin, 1933.

grown successfully. Milk and butterfat came from the same farms that also marketed swine and beef cattle. Fruits and vegetables were raised everywhere for domestic consumption and on a few truck farms for market. Potatoes were an important specialty in limited areas of Minnesota, Wisconsin, and Missouri. Sugar beets were raised in parts of Nebraska, tobacco growing achieved some importance in Wisconsin, and chickens, turkeys, geese, and ducks were ubiquitous. But in spite of these many side issues, the most important activities of farmers in the western Middle West centered on corn or corn-and-livestock growing, on wheat growing, and on dairy farming.<sup>14</sup>

Another circumstance, clearly apparent to the most casual observer, was the prevalence of the single-family farm. There were exceptions, of course, but in general the farmer of this region lived on his own or rented land and carried on his farming activities mainly with such aid as he could obtain from his wife and children. The larger his crop of boys and girls old enough to help with the work the better he was able to handle his labor problem. If he needed more help than his own family could give him, the hired man or hired hand, most likely the grown son of some other farmer, was introduced to supplement the family labor supply. If the farmer's wife, with the help of her own daughters, could not do all the work that fell to her lot, she sought the aid of a hired girl. Neither the hired man nor the hired girl was thought of as an inferior; in many instances the hired man became a son-in-law, and the hired girl, a daughter-in-law. Working out as a hired man was a generally accepted method by which any young man without means obtained the start necessary to begin farming on his own.<sup>15</sup>

The ideal size of a family farm was traditionally 160 acres, and on the average the actual was not far from the ideal. This was the size of the farm allowed to each settler under the terms of the Homestead Act of 1862, but most of the farms in the western Middle West had never been homesteads. The Homestead Act allotted 160 acres to each settler merely because a farm of that size had long been considered to include about the correct

number of acres for one individual to operate. Eighty-acre farms were regarded as too small for economical farming. They required the same outlay for housing, for work horses, and for machinery as the larger farm but produced only half as much. They furnished more work than the farmer could do alone but not enough to justify him in employing a year-round farm hand. And in the corn belt, where thrifty farmers expected about 90 percent of their land to be tillable, the corn rows were apt to be too short.<sup>16</sup>

Farming was definitely a capitalistic affair and required a heavy investment. The size of the investment depended mainly upon the price of land, which varied from place to place and from time to time. A typical northwestern farm, according to one estimate, would in 1910 represent an investment of \$12,000. Of this sum about \$1,400 would be in buildings, \$350 in machinery, and \$1,400 in livestock—the rest, of course, in land.<sup>17</sup> Not every farm, by any means, was wholly free from mortgage, while in many cases chattel loans and store bills added materially to the farmer's burden of debt. But the farm loan or farm mortgage was not necessarily an evidence of thriftlessness. It might, on the contrary, be regarded as a kind of evidence of prosperity. The wise farmer improved his buildings, bought new machinery, or expanded his acres even if to do so meant borrowing the necessary funds. Credit for the farmer was as necessary and proper as credit for any other business man.

A burning problem throughout the entire Middle West was the steady increase in farm tenancy. "Nothing is more important to this country," said Theodore Roosevelt in 1907, "than the perpetuation of our system of medium sized farms worked by their owners. We do not want to see our farmers sink to the condition of the peasants in the old world, barely able to live on their small holdings, nor do we want to see their places taken by wealthy men owning enormous estates which they work purely by tenants and hired servants."<sup>18</sup> And yet, it seemed evident that something akin to the condition Roosevelt feared was coming

<sup>14</sup>Wallaces' Farmer, 39:540 (Mar. 27, 1914).

<sup>17</sup>Wilcox, Northwestern Radicalism, 23.

<sup>18</sup>Wallaces' Farmer, 32:1145 (Oct. 11, 1907). On this subject in general, see W. J. Spillman and E. A. Goldenweiser, "Farm Tenantry in the United States," U. S. Dept. of Agriculture, Yearbook, 1916, p. 321-346.

<sup>14</sup>See the appended map showing type-of-farming areas in 1930, in Elliott, *Types of Farming*.

<sup>15</sup>Paul S. Taylor, "The American Hired Man: His Rise and Decline," U. S. Bureau of Agricultural Economics, *Land Policy Review*, 6(1):3-17 (Spring 1943).



about. Census statistics showed a steady increase in tenancy throughout the western Middle West, and what was even more alarming, an increase which made tenancy more marked in this region than anywhere else in the United States, except the South. In Iowa, for example, 76.2 percent of the farms had been owned by their occupants in 1880, but twenty years later, in 1910, only 62.2 percent were so owned. Furthermore, only half of the farms of the State were operated exclusively by their owners.<sup>19</sup> Four years later, on the eve of the first World War, according to a reliable authority, practically 40 percent of the farms in the corn belt were being cultivated by tenants. In parts of Illinois this proportion was no doubt well above 50 percent, while in some of the newer and more sparsely settled sections it dropped to less than 20 percent. But the long-cherished ideal, according to which each farmer owned his own farm and was thus accountable to himself alone, seemed farther away from reality each succeeding year. If the tenant farmers were only organized, wrote one realistic observer, they could easily control elections and take over the State governments.<sup>20</sup>

There were two principal types of landlords. One was the retired farmer who, at perhaps sixty years of age, gave up farming and moved to town. Sometimes he rented to a son, or to a son-in-law, or to a nephew, and thus to a prospective heir, but in most cases he counted on enough by way of rent to take care of his needs. Thousands of these retired farmers had begun life as farm hands, had then become tenants, then farm owners, and at last retired farmers able to live on their rents and the interest on their savings. Many of them continued to take an active interest—frequently for the tenant's peace of mind a too active interest—in the farm they had left. Retired farmers often found that they had underestimated the expense of living in town and were inspired to drive new and harder bargains with their tenants, while in their communities they became "stationary" citizens, men who could be counted upon to vote consistently against better schools or city improvements on the sole ground that anything that might raise taxes was wrong.<sup>21</sup>

<sup>19</sup>U. S. Bureau of the Census, 13th Census, 1910, *Agriculture*, 6:507.

<sup>20</sup>*Wallaces' Farmer*, 35:1494 (Nov. 4, 1910), 37:455, 1019 (Mar. 8, June 28, 1912), 39:541 (Mar. 27, 1914).

<sup>21</sup>*Report of the Country Life Commission*, 21 (60 Congress, 2 Session, *Senate Document 705*, serial 5408).

Another type of landlord was the investor, or as he was more likely to be called, the speculator. Farm land in the Middle West had for many years risen steadily in value and was thus considered by many investors to be safer than any bond, mortgage, or security on the market. Counting in the prospective rise in value of the farm, landownership seemed to promise a higher rate of return than any comparable investment. Investment-minded landlords, unlike the retired farmer, might know nothing whatever of farming, and some of them were totally unconscious of the need of keeping up the fertility of the land they owned. The worst of them seemed to "regard the farm as something like the old-fashioned coupon bond, from which they can clip coupons twice a year on the particular day and date on which they are due, whether crops are good or bad."<sup>22</sup>

While some farms fell to landlord-investors through the foreclosure of mortgages, there was another, quite different, cause of landlordism. Many prosperous farmers, convinced that land values had reached too high a figure, sold out their farms and moved north, west, or south to newer and cheaper lands. The number of Americans, mostly farmers, who left the United States for Canada exceeded 100,000 annually by 1911, while other thousands moved to the Mountain States, to the Pacific coast, to the South, and even to Mexico.<sup>23</sup> These migrations were attended by far greater risks than most of the migrating farmers fully understood. Farming by irrigation or farming in an area of reduced rainfall involved new techniques, and while the land was cheaper, the man who purchased it was often poorer before he mastered them. Corn-belt farmers who went west found out, usually only by experience, that beyond the ninety-ninth meridian conditions for corn growing were far less satisfactory than in the regions from which they had come. But they left in numbers just the same, and upon the land they vacated there often came tenants who were far less able to do the work than the man who had sold out. The time had come, said one editorialist, when Americans should settle down. "The farmers of the United States have been playing leapfrog over each other for over a hundred years, in fact, ever

<sup>22</sup>*Wallaces' Farmer*, 34:40 (Jan. 8, 1909). See also E. H. Thomson and H. M. Dixon, "A Farm-Management Survey of Three Representative Areas in Indiana, Illinois, and Iowa," U. S. Dept. of Agriculture, *Bulletin 41* (1914).

<sup>23</sup>*Report of the Country Life Commission*, 49.



since the Revolution . . . It is time for us to realize that the value of land depends more than anything else on the men who farm it."<sup>24</sup> But, at least as far as Iowa was concerned, all such pleas were in vain. That State lost steadily in farm population, and the census of 1910 even showed a decline in the total number of inhabitants.<sup>25</sup>

Rents paid by tenants varied. The prevailing rent in Illinois, according to one landlord, was half the corn, two-fifths the oats, and \$5 an acre for meadow and pasture. In the corn-belt States generally, it was customary for the tenant to pay from one-third to one-half the grain he raised as rent. He was required, as a rule, to furnish all the necessary teams, implements, and seed, and in addition whatever labor was necessary to cultivate the land and keep it in good shape. He might also be expected to pay the cost of threshing and to deliver the grain to the elevator free of charge. Owners who furnished teams or other equipment for their tenants took a correspondingly larger share of the crop. Cash rentals, which were very common, ranged from \$2 to \$5 or \$6 an acre, depending upon the productiveness of the land. Sometimes land on which crops were raised was rented for a share of the crop, while meadow or pasture land on the same farm was rented at so much per acre. Cash tenants complained bitterly that their rents were raised much more rapidly than the rise in price of farm products justified and that they were certain of getting a raise in rent if they exerted themselves to build up a farm so as to make it pay.<sup>26</sup>

While some landlords were benevolent and thoughtful, others cared little for their tenants' welfare. Most landlords insisted on a short-term lease, usually good for only one year. The tenants, landlords held, were as a whole an inferior lot and not to be trusted. The only way an owner could protect his farm was to be able to get rid of a poor tenant in the briefest possible time. The one-year tenant, however, condemned to uncertainty of

tenure and to frequent moving, tried to get all he could out of the land while he was on it and to give to it the least possible attention in return. Rented farms were often distinguished by their poorly kept buildings, their deepening gullies, and their infertile acres. Landlords were frequently shortsighted along other lines also. They objected to making the improvements necessary to enable their tenants to farm at a profit. Or, if they consented grudgingly to erect buildings and fences and to lay tile for drainage, they might require the tenant to board the carpenters and other workmen free of charge, not to mention hauling in the needed materials and filling up the ditches after the tile had been laid.<sup>27</sup>

In quality, tenant farmers varied widely. In spite of the handicaps under which they labored, many of them were in reality good farmers. Some had once been farm laborers and by saving their wages had accumulated enough capital to start in as tenant farmers. They expected to emerge eventually as farm owners and in many instances did so. Others had fallen in the economic scale, whether from bad luck, or bad farming, or bad management, and had become tenants where once they had been owners. The dishonest and thriftless were not lacking. Some were mere soil robbers who got every dollar they could out of the acres they rented and acted on the sentiment, "After us the deluge!" Some contrived to hide their profits and to cheat the landlords out of their just shares. Some were mere incompetents, men who could find nothing else they were able to do, and farmed simply to make a living.<sup>28</sup>

Tenancy in general tended to result in poor farming. The tenant, particularly if his tenure was for only a year, rarely kept up a farm as well as if he had been its owner. He lacked conspicuously the proprietor's interest in maintaining the fertility of the soil and the good appearance of farm buildings. Landlords, particularly those of the speculator type, were as much to blame for this as their tenants. Knowing little or nothing of farming, they were too often interested merely in making long profits or in harvesting the unearned increment that came from selling their land for more

<sup>27</sup>*Ibid.*, 33:1582 (Dec. 18, 1908).

<sup>28</sup>*Report of the Country Life Commission*, 41-42; *Wallaces' Farmer*, 34:4 (Jan. 1, 1909); *Report of the Special Committee on Farm Tenancy* (75 Congress, 1 Session, Feb. 16, 1937, *House Document 149*, serial 10126).

<sup>24</sup>*Wallaces' Farmer*, 38:1475 (Oct. 31, 1913). See also *ibid.*, 39:1044 (July 24, 1914).

"I never saw an oft removed tree,  
Nor yet an oft removed familiee,  
That throve so well  
As one that settled be."

<sup>25</sup>U. S. Bureau of the Census, 13th Census, 1910, *Abstract*, 24.

<sup>26</sup>*Wallaces' Farmer*, 33:1388 (Nov. 13, 1908), 35:1184 (Sept. 9, 1910).

than it had cost them.<sup>29</sup> Critics of the system pointed out that the first and most important reform was to get rid of the one-year lease. They urged that the tenant be assured tenure as long as he farmed satisfactorily and immunity from frequent and unreasonable increases in rent. The English system, which conceded the right of the tenant to whatever fertility he had put into the soil without being able to harvest it, was cited as an example for American landlords. In England, unlike the United States, a tenant could count on a virtually permanent lease and just treatment. Should the landlord grow careless with the tenant's rights, the tenant had the right of action at law for damages.<sup>30</sup>

Tenancy, however, was by no means the only cause of exploitative farming in the Middle West. American farming of the nineteenth century, in general, according to one authority, might "very safely be pronounced a failure." It had been conducted throughout most wastefully—a mere matter of "mining" the "virgin fertility" of the soil. The land was slowly wearing out; the annual yield per acre was on the downgrade. The old adage, "poor land, poor people; rough land, rough people," might eventually apply to the western Middle West, fat as its lands appeared to be. "This lessening of soil fertility," declared the Country Life Commission appointed by President Roosevelt in 1908, "is marked in every part of the United States, even in the richest lands of the prairies. It marks the pioneer stage of land usage. It has now become an acute national danger, and the economic, social, and political problems arising out of it must at once receive the best attention of statesmen."<sup>31</sup>

And yet American agriculture in the first decade of the twentieth century, particularly in the western Middle West, gave the appearance of great prosperity. "The value of the farm products," wrote Secretary James Wilson in his annual report for the year 1909, "is so incomprehensively large that it has become merely a row of figures."<sup>32</sup> "There has never been a time," declared the Country Life Commission, "when the American farmer was as well off as he is to-day, when we consider not only his earning power, but the comforts and

advantages he may secure."<sup>33</sup> According to another observer, "One American harvest would buy the kingdom of Belgium, king and all; two would buy Italy; three would buy Austria-Hungary; and five, at a spot-cash price, would take Russia from the czar."<sup>34</sup> In short, the farmers, tenants and landlords alike, were making money. Farm labor was fully employed and at what, for the times, were considered high wages. Prosperity showed itself in the improved character of farm homes, often surrounded by tasteful lawns and gardens, in the multiplication of better barns and farm buildings, in the sanitary water supplies and plumbing equipment that farmers were beginning to enjoy, in the increasing availability of good reading matter on farm tables, and in the farmers' demand for better educational facilities for their sons and daughters.<sup>35</sup> The case of the man who went through "the worst" in Kansas during the nineteenth century, but before the twentieth was far along had become one of the stockholders and directors in the local bank, owned an automobile, and sent his children to college was only one among many.

The prosperity of the American farmer during the early years of the twentieth century was due in large part to the high prices he was able to command for the commodities he had to sell. The Secretary of Agriculture, in his report for 1910, pointed out that if the year 1899 were regarded as 100, the value of farm products had risen as follows: 1900, 106.4; 1905, 133; 1907, 158.7; 1908, 167.3; 1909, 182.8; and 1910, 189.2.<sup>36</sup> Under these circumstances it seemed reasonable to assume that there was "good money for every man on good land who farms right." After 1910, the steady rise in farm prices was somewhat arrested, but compared to the low quotations of the nineties the farmers' receipts seemed excellent indeed. Wheat in 1914 brought around 80 cents a bushel, corn from 60 to 70 a bushel, butter from 25 to 30 cents a pound, and other farm prices in proportion. Such prices contrasted markedly with those of the nineties, when wheat sold for from 50 to 60 cents, corn for 25 or 30 cents, and butter from 12 to 20 cents.<sup>37</sup>

<sup>29</sup>Report of the Country Life Commission, 21.

<sup>30</sup>H. N. Casson, in *Wallaces' Farmer*, 33:871 (July 10, 1908).

<sup>31</sup>Report of the Country Life Commission, 20; *Wallaces' Farmer*, 34:40 (Jan. 8, 1909).

<sup>32</sup>U. S. Dept. of Agriculture, *Yearbook*, 1910, p. 10.

<sup>33</sup>*Ibid.*, 1914, p. 517, 529, 624; *Wallaces' Farmer*, 35:745, 1734 (May 6, Dec. 23, 1910).

<sup>29</sup>Report of the Country Life Commission, 40; *Wallaces' Farmer*, 33:534 (Apr. 10, 1908).

<sup>30</sup>*Ibid.*, 38:650, 1372 (Apr. 11, Oct. 10, 1913).

<sup>31</sup>*Ibid.*, 33:1061 (Sept. 4, 1908); *Report of the Country Life Commission*, 38, 41.

<sup>32</sup>U. S. Dept. of Agriculture, *Yearbook*, 1909, p. 9.

Attempts to explain the prevailing high prices were widely varied. Some, President Taft for example, held that the trouble was merely an increase in consumption without a corresponding increase in production. Or, as another phrased it, "Population has simply been increasing more rapidly than farm products; too many people in the town—too few on the farms."<sup>38</sup> Others noted that any greatly increased production seemed unlikely in the future, since practically the entire public domain had already been absorbed, while lands in the older sections were rapidly losing their fertility. The expansion of the corn belt seemed particularly improbable, for the growing of corn, due to climatic reasons, was confined to an area already fully exploited. Furthermore, important new uses were being found for corn. Careful observers noted that the rising level of prices was by no means confined to the United States alone, and some of them argued that the increase in the world's supply of gold was partly responsible for price trends. The real trouble, they said, was that gold inflation had resulted in a steady decline in the purchasing power of the dollar.<sup>39</sup>

The high farm prices were deeply resented by the consumer public. Sometimes farmers were denounced as conscienceless monopolists who set the prices of the necessities of life to the disadvantage of every city dweller. Manufacturers claimed that the American farmer was lazy and inefficient. If only he would get busy and increase production, food would be cheaper, the wages of city laborers could be lowered, and the American manufacturer could the better meet foreign competition. But the farmers were disturbed only by the fear that the good prices might not last. Senator Porter J. McCumber of North Dakota voiced their sentiments when he said: "We are now approaching a condition when the farmer is about to secure equality of remuneration, and the moment we reach toward that goal of justice a boycott is started against his products, both in the cities and in the National Legislature, by the introduction of bills designed to destroy his profits . . . He is, however, receiving not one cent more for any article than he is justly entitled to, and in my candid opinion he is not receiving as much to-day as he is going to re-

ceive in the future, and in the very near future."<sup>40</sup>

But high prices for farm produce did not wholly explain the prosperity of the American farmer during the early years of the twentieth century. He was aided also by a phenomenal rise in the price of land. For the country as a whole, according to the census of 1910, land values increased in the preceding decade by 118.1 percent. In States like Wisconsin and Minnesota, with a large proportion of cut-over timber land, the increase was less than this, but, as the following percentages show, the advance was far greater in some of the States of the western Middle West: Wisconsin, 71.9; Minnesota, 82.2; Illinois, 104.1; Missouri, 107.9; Iowa, 123.0; Kansas, 189.0; Nebraska, 231.8; North Dakota, 321.3; and South Dakota 377.1.<sup>41</sup> Numerous records of land sales backed up the census figures. Iowa lands that thirty years before sold at from \$10 to \$30 an acre were selling in 1908 at from \$80 to \$125. Lands 6 miles distant from a railroad that in the 1870s were worth only \$3 to \$5 an acre, and in the 1880s from \$25 to \$30 an acre, brought in 1910 from \$135 to \$155 an acre. Farmers who had been able to hold onto their farms had thus accumulated wealth at a rapid rate, not so much from the prices for which farm products sold as from the rapidly appreciating value of the acres they owned. Mortgages that had occasioned the greatest anxiety a few years earlier could now be regarded as negligible. Whether he realized it or not, the average Middle Western landowner had made his money, not so much from good farming, as from the unearned increment that came with the ownership of farm lands. To a considerable extent, he was only a successful speculator.<sup>42</sup>

Explanations for the rise in land values were as varied as those which were advanced to explain the rising prices paid for farm products. Higher prices for grain, livestock, and dairy produce would of course tend naturally to boost land prices, but the increase in value of farm lands had quite outrun the increase in price of farm products. Nor could the rising price of land be ascribed to its increased

<sup>38</sup>*Congressional Record*, 61 Congress, 2 Session, Feb. 4, 1910, p. 1479-1480; *Wallaces' Farmer*, 35:431-432 (Mar. 11, 1910). See also *ibid.*, 35:679 (Apr. 22, 1910).

<sup>39</sup>U. S. Bureau of the Census, 13th Census, 1910, *Agriculture*, 5:28, 78, and plate facing 44; *Report of the Country Life Commission*, 20.

<sup>40</sup>*Wallaces' Farmer*, 33:1061 (Sept. 4, 1908), 34:1704 (Dec. 31, 1909), 35:369 (Mar. 4, 1910).

<sup>38</sup>Myron T. Herrick, *Preliminary Report on Land and Agricultural Credit in Europe*, 5 (62 Congress, 3 Session, 1912-13, *Senate Document* 967, serial 6364); *Wallaces' Farmer*, 36:542 (Mar. 24, 1911).

<sup>39</sup>*Ibid.*, 34:1219 (Oct. 1, 1909), 35:1570 (Nov. 25, 1910), 37:1242 (Sept. 6, 1912).



productivity for in spite of the best efforts of the proponents of scientific agriculture, the yield per acre had risen at best only a very little. Much was made of the supposed "disappearance of free land" on the theory that the supply of available land was being cut down right at the moment when the demand for it was greatest. Actually, there was much free land available in the arid west, and much of it was being taken up by homesteaders.<sup>43</sup> But lands that required expensive irrigation works to make them productive were hardly "free," while unirrigated lands were for most pioneers a bad gamble. Probably the demand for land really was up, and the supply of good land, down. Farms were worth more also because of the improvements their owners had made on them, because of the greater availability of markets, because of the better roads and schools they had paid for, and because of the world's increasing gold supply which had inflated all prices. Undoubtedly, also, the speculative spirit was influential. Farmers, instead of depositing their savings in banks or investing in industrial stocks and bonds, bought more lands knowing that land values were sure to rise. Speculators who had no interest whatever in farming bought land for the 6 or 8 percent annual rise in value that seemed a certainty throughout the early years of the century.<sup>44</sup>

This picture of high prices and general agricultural prosperity contrasted oddly with the fact that farm population relatively, and in many communities actually, was on the decline. The State of Iowa, one of the richest in the corn belt and one almost exclusively dependent on agriculture, showed, as already noted, an actual loss, a loss which from 1900 to 1910 amounted to three-tenths of one percent in the population of the State as a whole. But in this State, as in many others, the most notable fact was the drift of the people from the farms to the towns and cities. Wherever the land was most valuable for agricultural purposes it seemed that the decline in country population was most marked. Cities everywhere had grown. Iowa, in spite of its decrease in population, found that its principal city, Des Moines, had an increase of 39 percent during the very

decade when the population of the State as a whole was falling off.<sup>45</sup>

Several factors entered into the explanation of this exodus from the farms of the Middle West. Of fundamental importance was the increasing reliance upon agricultural machinery. With the new machines, fewer farmers could produce more goods. "A boy with four horses and a modern binder can cut and bind as much in one day as from ten to fifteen men could in a day in the time of his grandfather." But some blame lay also with the high prices that lands in the Middle West had begun to command. It was because of these prices that so many farmers sold out to their neighbors or to speculators and invested in farms located in newer areas where the prices were not so high. This movement of population did not lessen the Nation's total farm population, but it did lessen the number of farmers in regions where land prices were excessively high. Most discussed of all the causes of rural decline was the lure of the city. Farm boys and girls were attracted by the higher wages and shorter hours that went with city jobs. They craved the excitement of city life, the superior comfort of city homes, and the variety of opportunities that the cities offered.<sup>46</sup>

It was this competition with the city that made the problem of farm labor so persistently acute. Farm labor, as those who really knew patiently explained, was skilled labor. A boy who had grown up on a farm knew many things that only years of experience could teach. When he left to work on the railroads, or in the factories, or in city stores, the loss to the farm was serious. Farm labor commanded actually very high wages, enough sometimes to enable the thrifty farm laborer to save from \$200 to \$250 per year. But so much of this pay came in wages, board, shelter, heat, and washing and ironing that it was hard to make the farm boy see that the \$20 and up he could earn on the farm was nearly all clear profit and not to be compared to the city wages from which he must pay high prices for board and room and for every service. Efforts to turn the tide of immigration farmward were not very helpful. The European immigrant, even if he had been a peasant, knew little of American farming methods and was prac-

<sup>43</sup>Fred A. Shannon, "The Homestead Act and the Labor Surplus," *American Historical Review*, 41:637-651 (July 1936).

<sup>44</sup>*Report of the Country Life Commission*, 20, 30, 40; *Wallaces' Farmer*, 36:1260 (Sept. 15, 1911), 37:1716 (Dec. 6, 1912).

<sup>45</sup>U. S. Bureau of the Census, 13th Census, 1910, *Abstract*, 68. See also *Wallaces' Farmer*, 35:1493, 1540 (Nov. 4, 18, 1910), 39:851 (May 29, 1914).

<sup>46</sup>*Ibid.*, 34:43 (Jan. 8, 1909), 35:1467, 1493 (Nov. 4, 1910).



tically useless on the typical American farm. Furthermore, he, too, liked the city better, and generally preferred to stay there. As for unemployed city workers, they were apt to be a positive liability. If only an adequate supply of farm labor could be obtained, some said, crops could readily be increased by 25 percent. "The greatest problem of the statesman of the future is to keep enough men on the land to make it produce the food required at prices the consumer can afford to pay."<sup>47</sup>

The decline in rural population was a source of considerable worry to farm and city residents alike. Thoughtful observers sought long and earnestly for a remedy. Something must be done, they concluded, to improve "social conditions in the open country." The thesis almost universally accepted was that, if the schools, churches, roads, home conveniences, and social activities of the farm could only be made to equal those of the city, there would be no further serious lack of people on the farm. The rural free delivery of mail and the party telephone line helped some but hardly enough to overcome the "isolation and utter barrenness" of country life. The need for good roads seemed obvious, but many landowners, fearful lest they might have to foot the gigantic tax bill involved, were strangely sceptical. Besides, if the roads were improved, would not the farmers use them mainly to go to town? What could be done to renovate the country church and make it a more satisfying social center? What could be done to promote the formation of social organizations comparable to the once active but now almost forgotten Grange? What could be done to provide sports and amusements in the country comparable to those so readily available in the city? Until answers for such questions as these could be found, it was idle to preach the gospel of back to the farm. The matter of first importance was to keep the people on the farm who were already there.<sup>48</sup>

The status of the country town was hardly better than that of the open country. Such local manufacturing activities as flour milling, wagon making, general blacksmithing, and tanning had once made each town a little industrial center. But establishments of larger capital, located at

strategic points, had put most of the local manufacturers out of business. Even as merchandising centers, the towns were running down. Sales direct from the factory to the farm or from mail-order houses cut in seriously on the profits of the small-town merchant. Retired farmers, with their chronic fear of taxes, kept civic improvements at a minimum. Boys and girls from the towns, no less than from the farms, were hypnotized by the good wages and the bright lights of the city. The time had been when the country town fronted toward the farm and was principally identified with rural life; now the town fronted rather toward the city, imitated the city, and as fast as it could manage it, moved to the city.<sup>49</sup>

What most concerned the public at large about the farm problem was the fear, duly reenforced by the rising price of foodstuffs, that agricultural production would be unable to keep pace with the growth of the Nation. The population of the United States had increased from 62,947,714 in 1890 to 75,994,575 in 1900, and 91,972,266 in 1910. And, whereas the rural population had constituted 63.9 percent of the whole in 1890, and 59.5 percent in 1900, it had dropped to barely 53.7 percent in 1910.<sup>50</sup> Exports of foodstuffs from the United States had begun to show a steady decline. In 1900 the value of foodstuffs exported was set at \$545,473,695; 10 years later it was only \$369,087,974, and formed but 21.59 percent of the total domestic exports, against 39.8 percent in 1900, 42.21 percent in 1890, and 55.77 percent in 1880. Meantime exports of meat and dairy products had declined to \$143,000,000 in 1910, against \$254,000,000 in 1906, and an average of \$222,000,000 during the preceding 10 years.<sup>51</sup> Soon all this, and possibly much more besides, would be needed at home. "With our increasing population," said Theodore Roosevelt, "the time is not far distant when the problem of supplying our people with food will become pressing. The possible additions to our arable area are not great, and it will become necessary to obtain much larger crops from the land, as is now done in more densely settled countries." The same idea was expressed by W. C. Brown,

<sup>49</sup>*Ibid.*, 34:43 (Jan. 8, 1909), 36:1219 (Sept. 8, 1911).

<sup>50</sup>U. S. Bureau of the Census, 13th Census, 1910, *Abstract*, 55.

<sup>51</sup>U. S. Dept. of Commerce and Labor, *Reports*, 1910, p. 68. See also *Wallaces' Farmer*, 35:236 (Feb. 11, 1910).

<sup>47</sup>*Report of the Country Life Commission*, 42. See also *Wallaces' Farmer*, 34:1451 (Nov. 12, 1909), 35:219 (Feb. 11, 1910), 36:214 (Feb. 10, 1911), 39:973 (July 3, 1914).

<sup>48</sup>*Report of the Country Life Commission*, 14; *Wallaces' Farmer*, 34:1338 (Oct. 22, 1909), 35:2 (Jan. 7, 1910).

president of the New York Central Railroad. "We must increase production per acre," he said, "by more intelligent methods, or we must face the relentless certain day when we shall not produce enough to supply our own necessities." Viewing the situation still more pessimistically, James J. Hill of the Great Northern Railroad insisted that "in twenty-five years we shall face a nation-wide famine."<sup>52</sup>

Confident that the Nation, if it were to continue to eat, must find some means of stimulating agriculture, publicists began to voice a demand for more effective agricultural education. Theodore Roosevelt, never very far from the head of any procession, urged the cause along. "We should strive in every way," he said, "to aid in the education of the farmer for the farm, and should shape our school system with this end in view."<sup>53</sup> A principal aim of this movement was to promote more scientific methods of farming, but efforts along this line were far from new.<sup>54</sup> Ever since the creation of the Department of Agriculture in 1862, the Federal Government had participated actively in the scientific study of agriculture and in the dissemination of agricultural information. Colleges of agriculture, subsidized by land grants under the terms of the Morrill Act of 1862, existed in nearly every State not only to carry on direct instruction but also to maintain experiment stations for original investigation and extension divisions to project scientific findings beyond the campus to the people on the farms. State departments of agriculture and private agencies also did useful educational work. Even so, critics could say that as yet "comparatively little really good farming has been done in the United States . . . . Speaking broadly, we have not even begun to really farm." Only by means of better farming, it was assumed, could the needs of the future for greater quantities of farm produce be met.<sup>54</sup>

But the believers in agricultural education had more in mind than merely the promotion of better

farming methods. They wished also to convince farm boys and girls that farm life offered comparable opportunities to city life. Too many farmers still thought of education as a means of providing for their children an easier way of life than farming. As a result, the schools, even the agricultural colleges, some said, were educating farm youth away from the farm. Country schools needed a thorough overhauling. The one-room school with its underpaid, undertrained, and overworked teacher must go. Means must be found to provide for the transportation of children to larger centrally located schools. The subject of agriculture must have an honored place in the school curriculum, and teachers must be prepared to present it realistically, in terms applicable to the daily life of farm boys and girls. Prospective farmers must be taught to understand their "own soils, climate, animal and plant diseases, markets, and other local facts."<sup>55</sup> Perhaps an enlarged United States Bureau of Education should restudy all public educational activities and furnish more effective guidance to State and local authorities. All this was supposed not only to make the farmer over into a better farmer but also to make him want to stay on the farm. Nevertheless, there was room for the word of warning voiced by an experienced observer: "No matter how much money the government pours out to educate him, he [the farmer] won't be educated except as he educates himself; and his children can not be educated unless he provides better schools than he has now and better teachers than he has now, and takes a greater interest in the education of his own children than most farmers do. No amount of education laid at the farmer's door is going to do him any good unless he takes it with a relish, digests and assimilates it, and puts it actually into practice on the farm."<sup>56</sup>

And yet, taken as a whole, the picture of farm life in the western Middle West during the early years of the twentieth century was by no means discouraging. Agriculture had rarely enjoyed a higher degree of prosperity. Corn growers, wheat growers, and dairymen, farmers of every description, were doing very well. The prices farm products commanded were high, and the unearned

<sup>52</sup>*Report of the National Conservation Committee*, 1:7 (60 Congress, 2 Session, Feb. 18, 1909, *Senate Document* 676, serial 5397); *Wallaces' Farmer*, 35:218 (Feb. 11, 1910); Ruth V. Corbin, *Federal Farm Credits, 1916-1936*, p. 2, unpublished master's thesis, University of Wisconsin, 1936.

<sup>53</sup>*Wallaces' Farmer*, 32:1145 (Oct. 11, 1907).

<sup>54</sup>Edwin G. Nourse, *Government in Relation to Agriculture*, 872-874 (Brookings Institution, Pamphlet 25, Washington, 1940); *Wallaces' Farmer*, 33:830 (June 26, 1908).

<sup>55</sup>*Report of the Country Life Commission*, 17. See also *Wallaces' Farmer*, 32:940 (Aug. 30, 1907), 34:1025 (Aug. 20, 1909), 35:7 (Jan. 7, 1910).

<sup>56</sup>*Ibid.*, 38:82 (Jan. 17, 1913). See also *Report of the Country Life Commission*, 56.

increment that came from the increase in value of farm lands added a substantial quota to rural wealth. There were problems to worry about—the increase in tenancy, the shortage of labor, the drift to the city—but they were for the most part problems of prosperity, not of adversity. How could the farmers raise enough to feed the city dwellers? This was an opportunity and a challenge, not a reason for despair. Middle Western agriculture was sound, or at least so most people believed. Farm mortgages were universally acclaimed as gilt-edged securities, and they com-

manded low interest rates. Even the Federal Government was hard at work to keep the farmer prosperous. It provided for agriculture free of charge extensive investigational services that non-agricultural industries had to provide for themselves, and it aided generously the cause of agricultural education.<sup>57</sup> Agricultural discontent was chronic and endemic, but for the moment, at least in the western Middle West, it had less than the normal excuse for existence.

<sup>57</sup>Nourse, *Government in Relation to Agriculture*, 873-874.

## THE TRAFFIC IN FARM PRODUCE IN SEVENTEENTH-CENTURY ENGLAND

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Too much emphasis has been laid upon the isolation of the farmer in seventeenth-century England.<sup>1</sup> No tiller of the soil, and especially no grazier or shepherd, can live to himself alone. There are many things he needs for his business that he must buy. He can grow his own food, breed his own meat, clip his own wool, and tan his own leather, while the woods will, at a pinch, supply him with material for part of his tools and even for a dwelling,<sup>2</sup> but he needs iron and many other things which must be brought to him. And the ready exchange of goods was provided for by the weekly market in most towns and by the annual or half-yearly fair. The general incidence of the market and of the fair certainly made it unnecessary for the local inhabitant to journey far in order to sell his produce or to buy his needs,<sup>3</sup> but the merchants who attended the markets and fairs must have possessed a much greater mobility.

Although there can hardly have been more than four and a half million persons in the kingdom,<sup>4</sup>

the traffic necessary for their maintenance was increasing beyond what it had been, and at the same time the statutory labor on the roads was becoming less efficient so that inland mobility was growing less flexible than perhaps it had been.<sup>5</sup> Roads were quite unmade, and the increase of heavy-wheeled traffic, wagons and coaches, and the greater numbers of beasts of burden and beasts for meat which traversed these dirt tracks made them steadily worse. Still in spite of all exordiums upon the vileness of such roads,<sup>6</sup> any animal could walk along them, provided it did not get submerged in mud or water, and the great wheeled slow-moving wagons could be dragged along by huge teams and main force. Progress of the carriers must have been something like that of the pioneers who took the covered wagons across the wide prairie, and except for the closer neighborhood of the villages must have been very similar.

In such elementary conditions of development recourse is usual to water transport wherever that is possible, and a great deal of heavy goods was carried coastwise or along such rivers as could be navigated. Little wonder can be felt, therefore, at the intense preoccupation of advanced minds with the possibility of improving river courses and making water transport more general. John Taylor,

<sup>1</sup>The evidence and results here presented should be collated with those in F. J. Fisher, "The Development of the London Food Market, 1540-1640," *Economic History Review*, 5(2):46-64 (1935).

<sup>2</sup>R. E. Prothero, "Agriculture and Gardening," in Sir Sidney Lee, ed., *Shakespeare's England*, 1:357 (Oxford, 1916).

<sup>3</sup>William Harrison, *Harrison's Description of England in Shakespeare's Youth*, ed. by Frederick J. Furnivall, 1:294 (London, 1877).

<sup>4</sup>Julius Beloch, "Die Bevölkerung Europas zur Zeit der Renaissance," *Zeitschrift für Socialwissenschaft*, 3:765-786 (1900).

<sup>5</sup>J. W. Gregory, *The Story of the Road*, 197-216 (Glasgow, 1931).

<sup>6</sup>Henry Martyn Dexter and Morton Dexter, *The England and Holland of the Pilgrims*, 10 (Boston, 1905); Eleanor Trotter, *Seventeenth Century Life in the Country Parish*, 124 (Cambridge, 1919).

the water poet, suggested joining the Thames and the Avon rivers in the early years of the century. He found the Thames so blocked up in some parts that he had to wade and haul the boat,<sup>7</sup> but this did not dissuade him. He tried the Salisbury Avon for possibilities of tapping the corn country in the neighborhood.<sup>8</sup> Actual projects were not wanting. "In the time of Charles I Sir Richard Weston canalised the Wey; in 1661 Sir William Sandys obtained powers to cut channels and build locks on the Wye and Lugg. In 1665 Francis Mathew published a book on the 'Opening of Rivers for Navigation' and propounded to Cromwell a scheme for connecting London and Bristol by a canal to join the Thames and Avon. About the same time Yarranton proposed to connect Banbury with the Thames and Severn by making the Cherwell navigable from Oxford to Banbury, and by cutting a new channel from Banbury to Shipston-on-Stour, whence goods could be carried by the Avon into the Severn below Tewkesbury."<sup>9</sup> The famous Lynn navigation, tapping much of the Eastern Counties, was the subject of careful discussion,<sup>10</sup> both in relation to the drainage of the Fens and to its carrying capacity for goods. All this is an indication that men were engaged in trade to such an extent that facilities for transport were at least of some importance to them.

Doubtless the people interested were more a mercantile than an agricultural class, but there must have been a fairly large body of them, including higglers, badgers, factors for cheese and butter, corn dealers, meal men, cattle, horse and sheep drovers, and wool and cloth merchants. As one author has aptly put it, in such economic conditions, "Goods must be bought in small lots from domestic producers [and small farmers], and they

must be sold to distant consumers in small lots."<sup>11</sup> And in the seventeenth century England possessed two great industries only: agriculture and cloth. These were connected by their common interest in wool, but some progress in arable husbandry was made,<sup>12</sup> and this progress resulted in a little more net product which must be put on the market, while the tendency of the time was definitely towards commercial rather than subsistence farming, especially on the part of the squires and landowners who needed cash for the purchase of luxuries becoming increasingly available.

All farmers were advised at certain seasons of the year to dispose of surplus stock. In May, for instance, winter-fed cattle should be sold and pea-fed sheep disposed of because the grass-fed muttor then coming on was sweeter and prices would fall. August was another month when fat sheep and cattle might be sold, and in September the butchers were looking out for great beeves, home-fed pigs were sold for pork, and the bakers were all in the market for the newly harvested corn. Wool was also sold in this month. Sales of corn obviously went on till stocks were exhausted, and in November butter and cheese began to rise in price because "the higers forestall the market." Cattle continued to be got off in November, and of course poultry towards the end of the year.<sup>13</sup>

The grand preoccupation of the legislature was the "supply of London," and the *Calendar of State Papers, Domestic Series* contains many and varied documents bearing on this subject. However, there were other districts where some importation was necessary. There were the centers of the clothing trade in the southwest, in Essex and around Norwich and the colliery district centering on Newcastle-on-Tyne. There was also, of course, local redistribution of corn in accordance with the abundance or scarcity of the harvest from county to county.

The corn supplies of London were drawn from a wide area. The markets at Basingstoke, Reading, Farnham, Henley, Guildford, Warminster, Devizes, Gloucester, and Crediton were some of the

<sup>11</sup>Ray Bert Westerfield, *Middlemen in English Business, Particularly Between 1660 and 1760*, p. 127 (Connecticut Academy of Arts and Sciences, *Transactions*, v. 19, New Haven, 1915).

<sup>12</sup>I. Deane Jones, *The English Revolution . . . 1603-1714*, p. 299 (London, 1931).

<sup>13</sup>Matthew Stevenson, *The Twelve Months*, 23, 37, 42, 44, 51, 56 (London, 1661).

<sup>7</sup>John Taylor, *Last Voyage and Adventure . . .* (London, 1641).

<sup>8</sup>See John Taylor, "A New Discovery by Sea, with a Wherry from London to Salisbury (1623)," 23-26, in Charles Hindley, *The Old Book Collector's Miscellany*, v. 3 (London, 1873).

<sup>9</sup>Benaiah W. Adkin, *Land Drainage in Britain*, 91 (London, 1933). See also John Lloyd, Jr., *Papers Relating to the History and Navigation of the Rivers Wye and Lugg*, 2-12 (1873); Andrew Yarranton, *England's Improvement by Sea and Land . . .*, 1:116 (London, 1677).

<sup>10</sup>Cornelius Vermuyden, *A Discourse Touching the Drayning the Great Fennes . . .* (London, 1642); William Dugdale, *The History of Imbanking and Drayning of Divers Fennes and Marshes . . .* (London, 1662).



focal points for inland supplies, and the south coast ports like Christchurch and Arundel and the east coast towns sent quantities along the coast. Malt was brought in wagons from Abingdon in Berks and Ware in Herts.<sup>14</sup> Unfortunately there is little quantitative measure of the trade, either as a whole or as a measure of the supply drawn from the different districts.

Harvests fluctuated widely in the first half of the century, and not only the supply of London but that of other districts constantly occasioned the government anxiety. In 1622 and 1623, for instance, the situation was so bad that a survey of the available supplies of the country was made.<sup>15</sup> Again in 1631 the shortage was so marked that measures were proposed for stocking the capital. In this connection an estimate of the requisite amount was made. The city and liberties were thought to need about 1,550 quarters weekly, and Westminster, Ratcliffe, Limehouse, Wapping, etc., another 1,000, bringing the annual total to between 130,000 and 140,000 quarters, a quantity larger than the granaries would hold. There was indeed only storage for some 16,000 quarters in all.<sup>16</sup> It was supposed that the average per capita consumption was about 8 ounces daily, but this is probably on the high side. In a country district at this date a farmer and his family were using somewhere about 1½ quarters of wheat each per year,<sup>17</sup> and if much the same quantity was used in London the population of that city was about 100,000. The whole population of London did not eat wheat bread, but if they consumed the inferior grains they probably ate more of them, and the bulk to be carried was by so much the greater.

Obviously so large a quantity of grain would need to be drawn from many different quarters. The yield of wheat ranged anywhere between 10 and 20 bushels an acre and sometimes higher,<sup>18</sup>

but if the country as a whole averaged 15 bushels it was fortunate. At such a rate the whole produce of some 9,000 acres would be required to feed the metropolis; and in the farming economy of those times a net product of this order would have to be collected little by little from some thousands of villages scattered throughout the predominantly arable area.

It is impossible to determine what proportion of the supply of London was drawn from the different districts, but some figures occur which give a rough indication of the main sources of supply. For instance, there was quite a substantial trade from the coast ports of Sussex to London. The clearing of the woods for the iron foundries and glass works had resulted in an extension of the arable acreage in that county,<sup>19</sup> and the surplus corn found its way to Arundel and Chichester and thence by sea to London. Some measure of the quantity available here can be derived from notes in the *Calendar of State Papers, Domestic Series*. In 1627 certain London bakers complained that the ships containing 400 quarters of wheat which they had purchased at Chichester were detained at Dover. There was difficulty again in 1629 when the Brighton ships carrying Chichester and Shoreham wheat were afraid to venture to sea for lack of a convoy.<sup>20</sup> "In 1628 Lucas Jacob proposed to export 10,000 qrs. of wheat from Chichester and Arundel; and in the same year Henry Chitty of Chichester was recommended to the Privy Council as being able to supply 8 or 10,000 qrs. of wheat . . . in 1629 Lucas Jacob was allowed to export 250 lasts of wheat for the use of the Army in the United Provinces . . . and in 1652 certain Cicestrians had licence to export to Ireland 5,500 qrs. of wheat and 1,500 qrs. of malt."<sup>21</sup> This trade was thus not only to London. In January 1639/40, for instance, the counties of Sussex and Southampton had license to export 300 lasts of wheat and 100 each of rye, barley, and malt, and a license was given for the export of 300 quarters of wheat and 50 quarters each of beans and peas from London and Newhaven to the Canary Islands.<sup>22</sup> The fluctuation of

<sup>14</sup>Westerfield, *Middlemen in English Business*, 150, 170.

<sup>15</sup>Great Britain Public Record Office, *Calendar of State Papers, Domestic Series, of the Reign of James I* [v. 10], 1619–23, p. 405, 460, 470–471. Hereafter, this work is cited as *C.S.P., D.S., . . . James I*.

<sup>16</sup>Great Britain Public Record Office, *Calendar of State Papers, Domestic Series, of the Reign of Charles I*, [v. 5], 1631–33, p. 78, 122–123. Hereafter, this work is cited as *C.S.P., D.S., . . . Charles I*.

<sup>17</sup>Robert Loder's *Farm Accounts, 1610–1620*, ed. by G. E. Fussell (Royal Historical Society, Publications, Camden Third Series, v. 53, London, 1936).

<sup>18</sup>*Ibid.*

<sup>19</sup>John Norden, *The Surveyors Dialogue . . .*, 216 (London, 1607).

<sup>20</sup>*C.S.P., D.S., . . . Charles I*, [v. 2], 1627–28, p. 140; [v. 3], 1628–29, p. 475. Cf. *ibid.*, p. 344.

<sup>21</sup>Adolphus Ballard, *A History of Chichester*, 60 (1929).

<sup>22</sup>*C.S.P., D.S., . . . Charles I*, [v. 15], 1639–40, p. 152, 331.

the harvest was, however, very great, and in 1630 the Sussex justices were arranging for the purchase of corn and its sale to the poor at 1 shilling a bushel less than it had cost.<sup>23</sup> In April 1631 there was a short supply in Portsmouth where 600 persons were living.<sup>24</sup>

Some of the corn of Sussex found its way by land carriage to the markets of Guildford and Farnham whence it went to London. In 1625 the weekly market at Guildford had increased so much of late years that it had to be supplied with more spacious quarters,<sup>25</sup> and in 1632 there were complaints of high prices in Sussex "from the adjacent markets in Surrey to which purveyors from the city of London resort."<sup>26</sup> After 1653 the Wey was navigable from Guildford to the Thames, and water transport to London was available.<sup>27</sup> In the latter part of the century, Farnham enjoyed the reputation of being the greatest market for wheat in England only being outstripped by Reading for barley.<sup>28</sup>

Naturally corn also came from the coast of Kent and up the Thames. Sheppey was famous for its wheat and Thanet for its barley.<sup>29</sup> The main grain-producing areas were the north and east of the county.<sup>30</sup>

Reading, whose sale of barley was greater than that of Farnham, shared a brisk trade in grain with other towns on the Thames. These drew their supplies from the arable lands of the Vale of White Horse and the adjacent parts of Berkshire and Oxfordshire. Henley also had a great trade in malt, and at the end of the century above 300 cartloads were often sold in a day at its weekly market.<sup>31</sup> One of the great markets of Berkshire was Ilsley

which had superseded the market on the Down. From this market and others in the locality grain was taken to Streatley for shipment to London.<sup>32</sup> The local market must also have caused a fair demand because distress for high prices is reported amongst the clothiers of Newbery in 1630, and in the same year the harvest failed in Buckingham so that the market of Chipping Wycombe had to be supplied from this source.<sup>33</sup>

The whole of East Anglia, including Essex, Suffolk, Norfolk and Lincoln and such of the northern Midlands as could be tapped by the ports on the east coast, were also engaged in export trade. Some corn came by land carriage from the Vale of Ringdale in north Hertford bordering on Cambridge to London. Norden proclaimed that this district "affordeth no small store of wheat and malte towards the provision of London."<sup>34</sup> The clothiers of Essex however were apt to need more corn than was produced in the county, and rye formed a conspicuous grain in the market of Colchester. In 1630 Dunmow and other markets reported a very great scarcity especially of barley, peas, and oats.<sup>35</sup> Here sprats were known as "weaver's beef."<sup>36</sup> There were traders in Middlesex as well as farmers, especially in the Enfield district, known as meal men and malt men, "the meale men for the most parte buying their wheate at the best hande, and convert it into meale and carrye it to market, and bring it home in monie. . . . The Malt men for the most part carrye for other men by the quarter, and yett profit greatly."<sup>37</sup>

Norfolk, so early as 1576, complained of restrictions upon export, because three parts of the county was then engaged upon tillage, a large and recent increase, and if the farmers were not allowed to sell in foreign parts they would have no money to

<sup>23</sup>William Durrant Cooper, "Social Condition in Sussex in 1631-1632," *Sussex Archaeological Collections*, 16:21 (Lewes, 1864).

<sup>24</sup>C.S.P., D.S., . . . *Charles I*, [v. 5], 1631-33, p. 4.

<sup>25</sup>E. A. Judges, *In and Around Guildford: Old and New*, 2 (Guildford, 1895).

<sup>26</sup>C.S.P., D.S., . . . *Charles I*, [v. 5], 1631-33, p. 257.

<sup>27</sup>Henry Rodolph De Salis, *A Chronology of Inland Navigation* (1897).

<sup>28</sup>John Aubrey, *The Natural History and Antiquities of the County of Surrey*, 3:346-347 (London, 1719).

<sup>29</sup>Cf. G. E. Fussell and V. G. B. Atwater, "Agriculture of Rural England in the Seventeenth Century," *Economic Geography*, 9:387 (1933). In this article the products of each county are tabulated.

<sup>30</sup>Richard Kilburne, *A Topographie, or Survey of the Countie of Kent*, 3 (London, 1659).

<sup>31</sup>John Ogilby, *The Traveller's Guide . . .*, 29 (London, 1699).

<sup>32</sup>William Hewett, *The History and Antiquities of the Hundred of Compton Berks*, 46 (Reading, 1844). Cf. Arthur L. Humphreys, *East Hendred*, 302 (London, 1923); and Elias Ashmole, *The History and Antiquities of Berkshire*, 1:xxix (London, 1719).

<sup>33</sup>C.S.P., D.S., . . . *Charles I*, [v. 4], 1629-31, p. 417-418.

<sup>34</sup>John Norden, *Speculi Britanniae Pars: A Description of Hartfordshire*, 1-2 (London, 1598).

<sup>35</sup>C.S.P., D.S., . . . *Charles I*, [v. 4], 1629-31, p. 417.

<sup>36</sup>*Diary of the Rev. John Ward, A. M., . . . from 1648 to 1679*, arranged by Charles Severn, 112 (London, 1839).

<sup>37</sup>John Norden, *Speculum Britanniae; The First Parte: An Historicall, & Chorographicall Discription of Middlesex* (London, 1593).

pay their rents or taxes. An idea of the volume of this trade can be obtained because Cromer had a license in 1576 to purchase 8,000 quarters of malt, barley, beans, and peas, and 2,000 quarters of wheat to export from Lynn and Yarmouth.<sup>38</sup> The latter town had three rivers useful for transport, and when these were frozen in 1607 land carriage between it and Norwich cost 24 shillings which would have cost 1 shilling 4 pence by water.<sup>39</sup>

There was constant friction about the export from the east coast. Private persons were said to export grain illegally, so that the poor had to eat bread made of mixed buckwheat and barley, a mixture they were loath to consume,<sup>40</sup> and when Yarmouth was short of barley an order had to be made that the grain should not be used for the Greenland voyage.<sup>41</sup> The millers at Bury St. Edmunds complained of not being allowed to buy and sell corn,<sup>42</sup> and the county of Norfolk was obliged to supply the navy at 4 shillings a quarter below the London price.<sup>43</sup> In 1631 there was trouble with the poor who would not permit buckwheat to be loaded for Rotterdam at Yarmouth, nor exports of corn from Wells and Clay.<sup>44</sup> Lucas Jacobs, whose trading activities were on the large scale, was supposed to have bought 120,100 quarters between 1608 and 1639 in divers places but especially in Norfolk.<sup>45</sup>

Lynn also tapped some of the supplies of the Midlands. Grain from Northamptonshire was sent to Wisbeach and Spalding, Bedford, and at the end of the century to Warwickshire, although the last market was declining then probably owing to increased supplies grown there on land reclaimed from the Forest. Some of Northampton's produce also went north to Derbyshire. The River Ouse was navigable as far as Bedford then.<sup>46</sup> In Leices-

tershire there were good weekly markets for corn at Loughborough and Lutterworth and other places.<sup>47</sup> Cambridge, before the drainage of the Fens, was accessible by water carriage to the sea, but after it was not possible for the tide to come within 20 miles of that place, and the University and Corporation of Cambridge petitioned Parliament to suppress the works.<sup>48</sup> The great fair at Stourbridge is sufficiently well known. Local supplies in all these places were nevertheless short in bad harvests.<sup>49</sup> So far as Nottingham was concerned, corn was brought in by the River Trent, and the carts that came by land to fetch the coals sometimes brought in supplies of grain.<sup>50</sup>

In addition to supplies from Northampton, Derbyshire had to rely upon corn imported at Hull. The county was only able to produce half of its requirements "so much of the land bearing nothing but oats, and so many thousands being employed in the lead mines, coal mines, stone-pits, and iron-works." Oats were largely used for human food, and the grain imported from Hull was rye. In 1631 imported grain from Holland is said to have saved the county from virtual starvation, and new enclosures were being made and pasture broken up to increase the arable acreage.<sup>51</sup>

The northern counties, sparsely inhabited as they were at this time, could not, by virtue of the poorness of their soil, bad drainage, and the general need for land reclamation, supply themselves. Northumberland and Durham had to be partly supplied from the south.<sup>52</sup> Grain supplies were drawn by sea from so far afield as Yorkshire, Cambridge, Norfolk, and Lincoln.<sup>53</sup> The northern counties were apt to be content with oats and rye, and there was a weekly market for the latter at

<sup>38</sup>H. W. Saunders, ed., *The Official Papers of Sir Nathaniel Bacon of Stiffkey, Norfolk... 1580-1620*, 131, 135-136 (Royal Historical Society, Camden Third Series, v. 26, London, 1915).

<sup>39</sup>Henry Manship, *The History of Great Yarmouth* (1619), ed. by Charles John Palmer, 116-118 (Great Yarmouth, 1854).

<sup>40</sup>C.S.P., D.S.,... *James I*, [v. 10], 1619-23, p. 490-491.

<sup>41</sup>*Ibid.*, p. 534.

<sup>42</sup>*Ibid.*, p. 484.

<sup>43</sup>*Ibid.*, [v. 11], 1623-25, p. 467.

<sup>44</sup>C.S.P., D.S.,... *Charles I*, [v. 4], 1629-31, p. 526-527, 545; [v. 5], 1631-33, p. 191.

<sup>45</sup>*Ibid.*, [v. 16], 1640, p. 4.

<sup>46</sup>John Morton, *The Natural History of Northamptonshire*, 5, 16 (London, 1712).

<sup>47</sup>William Burton, *The Description of Leicestershire*, 181, 187, *passim* (London, 1622).

<sup>48</sup>Cornelius Walford, *Fairs, Past and Present*, 122 (London, 1883).

<sup>49</sup>C.S.P., D.S.,... *James I*, [v. 10], 1619-23, p. 130, 544-545; C.S.P., D.S.,... *Charles I*, [v. 4], 1629-31, p. 414.

<sup>50</sup>*Ibid.*, [v. 4], 1629-31, p. 548.

<sup>51</sup>J. Charles Cox, *Three Centuries of Derbyshire Annals*, 2:189-191 (London, 1890).

<sup>52</sup>C.S.P., D.S.,... *Charles I*, [v. 3], 1628-29, p. 450.

<sup>53</sup>D. L. W. Tough, *The Last Years of a Frontier: A History of the Borders during the Reign of Elizabeth*, 45 (Oxford, 1928).

Newcastle-on-Tyne.<sup>54</sup> The trade to Newcastle was indeed so important to the Norfolk farmers that they were forced upon occasion to petition for license to transport.<sup>55</sup> The corn from Yorkshire for Newcastle was shipped at Bridlington, but there were satisfactory markets at Malton for wheat and maslin, oats at Beverley, and barley at Beverley and Pocklington. The Lincolnshire men came over to Hull on calm days and bought oatmeal at Beverley which they sold again at Brigg and its neighborhood.<sup>56</sup> In spite of the export from Yorkshire there were times when some parts of the county were short. In 1630 and 1631 some anxiety was experienced, but in 1639 and 1640 the harvest was so plentiful that exportation was necessary to enhance the price,<sup>57</sup> and in 1628, two years before the trouble, the East Riding especially, but Yorkshire generally, was so well stored with barley and peas that the farmers and tenants wished to export 2,000 lasts.<sup>58</sup> The northwestern counties also suffered from an inability to supply their own wants, so much so that in April 1578 barley, oats, and beans were sent by a long sea voyage from Somerset and Dorset to relieve a famine in the West March, but (unfortunately or otherwise is not explained) arrived too late.<sup>59</sup> Most of Cumberland, Westmorland, and Lancaster was then tremendously isolated, and parts of Cheshire were probably in much the same condition. Markets for corn however obviously existed, and one of these was at Warrington.<sup>60</sup>

Wales as a whole produced only cattle and sheep, but here and there in exceptionally fertile parts, sufficient grain was grown to permit an export trade. The Island of Anglesey was one of these. From here, the granary of Wales, corn was usually exported to all parts of Wales, but even in such a county famine was likely to occur, and in 1612

there was a drought, which brought such despair to the hearts of the people that great quantities of corn were then consumed in riotousness and drunkenness. The following year the inhabitants would have died of famine in heaps had they not been relieved from France and Ireland and other strange countries.<sup>61</sup>

Of the rest of Wales Pembroke seems to have been the most favored county. It was accessible by sea, and it was fertile. Corn, in quantities that loomed large in contemporary eyes, as well as most other farm products, was exported. Grain was the chief cash crop.<sup>62</sup> From Pembroke corn went to various places, but there were times when the county itself was short.<sup>63</sup> Some of the trade was mutual. In 1629 Tewkesbury supplied Pembroke and Carmarthen with 2,000 quarters of corn, but in 1630 Tewkesbury wanted a license to bring corn from these counties to supply their own necessities.<sup>64</sup> The trade was surrounded by difficulties. One merchant stated that wheat was not used for bread locally in order to secure himself, and an admiral seized shipping that was taking corn away from Wales so that the inhabitants of Aberystwyth complained of imports which spoiled the local market.<sup>65</sup> Some of the exports went to Bristol and other ports on the south coast of the Bristol Channel to supply the needs of the clothiers in the district.<sup>66</sup> Surprising enough there were also exports, probably of minute dimensions according to our ideas, from Cardiff and other South Wales ports to Bristol.<sup>67</sup>

The clothing district of Somerset formed a good market not only for the surplus of Wales, such as it may have been, but was forced upon occasion to draw supplies from very much farther afield. Once indeed there is a record of wheat and barley having

<sup>54</sup>[William Gray], "Chorographia: or, a Survey of Newcastle upon Tyne (1649)," *The Harleian Miscellany*, 3:277 (London, 1809).

<sup>55</sup>Saunders, *The Official Papers of Sir Nathaniel Bacon*, 134, 142.

<sup>56</sup>Henry Best, "Rural Economy in Yorkshire in 1641, Being the Farming and Account Books of Henry Best," *Surtees Society, Publications*, 33:99, 101 (Durham, 1857).

<sup>57</sup>*C.S.P., D.S., . . . Charles I*, [v. 4], 1629-31, p. 415, 532; [v. 15], 1639-40, p. 24; [v. 16], 1640, p. 97.

<sup>58</sup>*Ibid.*, [v. 2], 1627-28, p. 507.

<sup>59</sup>Tough, *The Last Years of a Frontier*, 46.

<sup>60</sup>William Beaumont, *Annals of the Lords of Warrington and Bewsey*, x (1873).

<sup>61</sup>J. O. Halliwell-Phillipps, ed., *A Minute Account of the Social Condition of the People of Anglesea in the Reign of James the First*, 7-8, 10 (London, 1860).

<sup>62</sup>Harry Owen, ed., *The Description of Pembrokeshire by George Owen of Henllys, Lord of Kemes* [c. 1595], 5, 55 (Cymmrodorion Record Society, no. 1, parts 1-2, London, 1892).

<sup>63</sup>*C.S.P., D.S., . . . James I*, [v. 10], 1619-23, p. 529.

<sup>64</sup>*C.S.P., D.S., . . . Charles I*, [v. 4], 1629-31, p. 445.

<sup>65</sup>*Ibid.*, [v. 11], 1637-38, p. 153, 291, 452; [v. 12], 1637-38, p. 112.

<sup>66</sup>D. J. Davies, *The Economic History of South Wales prior to 1800*, p. 62 (Cardiff, 1933).

<sup>67</sup>Rice Merrick, *A Book of Glamorganshires Antiquities* (1578), ed. by James Andrew Corbett, 95, 104 (London, 1887).



been carried by sea from Furness to Bristol, and wheat was at least once sent from the same place to Cornwall, presumably for the tin miners.<sup>68</sup> The whole of the southwestern counties indeed fluctuated between import and export according to the size of their harvest. Taunton people resented forestalling the market and rioted when they were short of food,<sup>69</sup> while the numerous reports about the different districts of the county show the constant anxiety of the local authorities which they wished to pass on to higher authority.<sup>70</sup> The Devon men were just as bad and resorted to highway robbery rather than see their food go abroad. One year they were able to export to Ireland; the next they had to import from that country.<sup>71</sup> Dorset supplied the Newfoundland shipping with corn but complained in 1631 of low prices which would not allow them to maintain the increased arable acreage, the gaining of which had been laborious and expensive.<sup>72</sup> A few years later corn was plentiful in Cornwall, Devon, and Somerset, but short in Worcestershire, Gloucestershire, and Warwickshire, and permission to transport it was sought.<sup>73</sup> Before the seventeenth century Cornwall was unable to supply the needs of its mining population in breadstuffs, and the markets were supplied weekly from the neighboring counties of Somerset and Devon not only with grain but with horseloads of bread, but when tin mining became less profitable and the population increased, by infinite pains the Cornishmen reclaimed their barren hillsides and grew sufficient corn to allow them to export in favorable years.<sup>74</sup>

It is clear that so bulky a commodity as grain

had a marked degree of mobility even in the early years of the seventeenth century, and its mobility was so great that it is impossible to lay down lines of traffic. Almost every town had its weekly market, and it drew supplies from the neighborhood or from a distance as necessity and opportunity offered. And there was a good deal of trade in grain with foreign countries by way of export in good years, by way of import in years of small harvests. The main lines of internal trade are pretty simple, but they are crossed hither and thither by local demand. London was the primary market. It drew supplies from a large part of the country. Newcastle and the north generally, and Derbyshire, were other points to which corn was shipped. Wales and the West Midlands sent corn to Bristol for Taunton and its environs, but aside from these main demands, each and every district was importer or exporter as occasion arose so that it is now impossible to unravel the complexities of this trade.<sup>75</sup>

Apart from the cereals the only other crops cultivated were a little flax and hemp, mainly for local use, a little hops in well-defined districts,<sup>76</sup> a few vegetables, and some fruit. There were few forage crops, hay, peas and beans, and vetches, and little of this came into the market. Although the horses and cows of London must have caused a demand, there is no clear record of this trade.

Carrots were a popular vegetable and were grown in Suffolk, Norfolk, Essex, and at Fulham and other places near London.<sup>77</sup> Burbidge, Wiltshire, excelled in turnips for the table and for peas,<sup>78</sup> and some other places are catalogued as of repute for particular articles, "Fulham Parsenep, Hackeney Turneps, Sandich Carrot, Walsingham Saffron, Workensop Liquerice, Birtport Hempe, Kirton Pippin, Cambridgeshire Pearemane, . . . Halliwell Mosse, Teukesbury Mustard, Droitwich Salt. . ."<sup>79</sup> The vegetables and especially the cabbage grown in the market gardens in the neighborhood of London excited the admiration of a Venetian Ambassa-

<sup>68</sup>Cf. William Cunningham, *The Growth of English Industry and Commerce*, 2:86, 92 (Cambridge, 1921).

<sup>69</sup>See Hubert H. Parker, *The Hop Industry*, 3-46 (London, 1934).

<sup>70</sup>Norden, *The Surveyors Dialogue*, 207.

<sup>71</sup>John Aubrey, *The Natural History of Wiltshire* (1685), ed. by John Britton, 36 (London, 1847).

<sup>72</sup>William Folkingham, *Feudigraphia*, 42 (London, 1610).

<sup>68</sup>Norman Penney, ed., *The Household Account Book of Sarah Fell of Swarthmoor Hall*, xxii (Cambridge, 1920).

<sup>69</sup>H. Byard Sheppard, "Courts Leet and the Court Leet of the Borough of Taunton," Somersetshire Archaeological and Natural History Society, *Proceedings*, 1909, 55(2):25 (Taunton, 1910); *C.S.P., D.S., . . . James I*, [v. 10], 1619-23, p. 396.

<sup>70</sup>*Ibid.*, p. 578-579; *C.S.P., D.S., . . . Charles I*, [v. 4], 1629-31, p. 399, 404, 415; [v. 5], 1631-33, p. 184.

<sup>71</sup>*Ibid.*, [v. 3], 1628-29, p. 458; [v. 5], 1631-33, p. 223; [v. 15], 1639-40, p. 241.

<sup>72</sup>*Ibid.*, [v. 5], 1631-33, p. 185-186; John Coker of Mapowder, *A Survey of Dorsetshire*, 3 (London, 1732).

<sup>73</sup>*C.S.P., D.S., . . . Charles I*, [v. 12], 1637-38, p. 156.

<sup>74</sup>Richard Carew, *The Survey of Cornwall*, 5 (London, 1602).

dor in 1617 and 1618.<sup>80</sup> Fruit was grown in well-defined districts, and apples and pears in the hedgerows of Kent, Worcester, Salop, Gloucester, Somerset, and Devon.<sup>81</sup> From Kent the fruit itself was sent to London,<sup>82</sup> as well as cherries, the latter also coming from the Isle of Ely.<sup>83</sup> In the Western Counties many apples were transformed into cider, large quantities of which were sent to London and other places.<sup>84</sup>

Other commodities which had to be carried were dairy produce and wool. Milk in liquid form could only be provided locally, and the supply of London was dependent upon cow keepers of the immediate neighborhood. The farmers' wives of Middlesex came to town two or three times weekly with supplies of milk, butter, cheese, and many other things.<sup>85</sup> Butter and cheese were more easily kept in good condition, and supplies were drawn from many of the Home Counties. Sussex sent both butter and cheese,<sup>86</sup> but Surrey butter only, the cheese being "robbed" to enable the butter to go to London.<sup>87</sup> The southeast of Essex added its quota of butter and cheese,<sup>88</sup> and Suffolk did the same, but its butter, like that of Surrey, was good at the expense of its cheese. There is no measure of the trade, but one Suffolk haven is said to have shipped 900 loads in an ordinary year.<sup>89</sup> Throughout the Eastern Counties this trade was very important, and large quantities were exported. One fortunate monopolist got a license for 21 years from 1629 to transport 3,200 barrels of butter yearly "to be bought within the cos. of Norfolk, Lincoln, and York" with the proviso that he was not to export

when the price was more than 4 pence a pound.<sup>90</sup> The barrel was a reputed firkin of 56 pounds. A few years later it was said that 5,742 firkins had been unlawfully exported from Hull, and measures were taken to prevent this trade.<sup>91</sup> In 1630 the situation of the country was so bad that enemy craft on the Norfolk, Suffolk, and Essex coasts prevented sailings between Yarmouth and the Thames so that cargoes of cheese, butter, and fish for London were delayed and likely to decay if a convoy were not speedily provided for the shipping. Apparently there was some combination amongst the merchants for the petition is from the cheesemongers of London.<sup>92</sup> Some of the West Midland Counties, including Derby, sent their butter and cheese to great markets, already well established in the seventeenth century, such as Uttoxeter where the London cheesemongers had set up factories. The butter sent to these markets was packed in coarse unglazed butter pots of Staffordshire ware.<sup>93</sup> It is a curiosity that there is little or no evidence for the seventeenth century about the Cheshire cheese trade, but this was probably run on much the same lines as in the eighteenth century.<sup>94</sup>

Wales, except in its most favored parts, was largely given up to grazing, and there was a good deal of butter and cheese exported. Cardiff was one of the ports for this trade and Pembroke was another. The produce went to Bristol and other ports on the south coast of the Bristol Channel and foreign parts, France and Ireland particularly.<sup>95</sup> The shipping here was at the mercy of pirates, great losses being sustained in 1626, so that the farmers could not pay their rents and many sailors were carried off as slaves to Saltee.<sup>96</sup> A license was granted in 1634 to transport out of Wales and Monmouth 3,000 barrels of butter yearly on the same terms as a previous license, *i.e.*, that no ex-

<sup>80</sup>"Diaries and Despatches of the Venetian Embassy at the Court of King James I, in the Years 1617, 1618, Translated by Rawdon Brown," *Quarterly Review*, 102: 436 (London, 1857).

<sup>81</sup>Norden, *The Surveyors Dialogue*, 208.

<sup>82</sup>Kilburne, *A Topographie, or Survey . . . of Kent*, 6.

<sup>83</sup>Edmund Carter, *The History of the County of Cambridge . . .*, 63 (Cambridge, 1753).

<sup>84</sup>John Worlidge, *Vineta Britannicum . . .*, preface (London, 1678).

<sup>85</sup>Norden, *Speculum Britanniae . . . Middlesex*, 12.

<sup>86</sup>Norden, *The Surveyors Dialogue*, 216.

<sup>87</sup>Aubrey, *The Natural History . . . of Surrey*, 326.

<sup>88</sup>John Norden, *Speculi Britanniae Pars: An Historical and Chorographical Description of the County of Essex* (1594), ed. by Henry Ellis, 8 (Camden Society, no. 9. London, 1840).

<sup>89</sup>Robert Reyce, *Suffolk in the 17th Century* (1618), . . . with notes by Lord Francis Hervey, 38 (London, 1902).

<sup>90</sup>C.S.P., D.S., . . . Charles I, [v. 4], 1629-31, p. 56, 555.

<sup>91</sup>*Ibid.*, [v. 9], 1635-36, p. 32, 162-163.

<sup>92</sup>*Ibid.*, [v. 4], 1629-31, p. 206.

<sup>93</sup>Francis Redfern, *History and Antiquities . . . of Uttoxeter*, 362 ff. (ed. 2, Hanley, 1886), citing Robert Plot, *The Natural History of Staffordshire*, 107-108 (Oxford, 1686).

<sup>94</sup>G. E. Fussell, "The London Cheesemongers of the Eighteenth Century," *Economic History*, 1:394-398 (1928).

<sup>95</sup>Davies, *The Economic History of South Wales*, 59-60.

<sup>96</sup>C.S.P., D.S., . . . Charles I, [v. 1], 1625-26, p. 213.

port should take place when the price was above 3 pence in summer and 4 pence in winter.<sup>97</sup>

In spite of its import on the coast, the inland parts of Somerset exported locally overland. Yeovil was a great market, and large quantities of both butter and cheese were taken into both Hampshire and Wiltshire from here.<sup>98</sup> Devon was not happy about its cheese, but its butter was good. However, little was exported except from a limited area on the borders of Somerset and Dorset,<sup>99</sup> and a license granted to a badger in 1607 to buy butter and cheese in Somerset to sell at any fair in Wiltshire, Hampshire, and Devon confirms this.<sup>100</sup> At a later day it was said that most of the cheese sold at the great fair of Weyhill came from Cheddar and Frome, Hampshire not being much of a cheese county.<sup>101</sup>

So much of the trade in butter was commonly sea-borne that it was easy to divert the traffic to a foreign market if the home market was not favorable, and the government kept a close eye upon it. There was no doubt some illegal trade, but a license to export 5,000 barrels annually for 21 years may indicate that the average supply was in excess of the demand,<sup>102</sup> while regulations about packing were issued both in 1634 and 1637 which ordered that the old and esteemed methods should not be changed.<sup>103</sup> "Time out of mind," the proclamation runs, "every firkin used to be 56 lb." and the cask might only weigh 8 pounds. Some casks were then being used which weighed 12 to 14 pounds and when filled 58 to 62 pounds, an evil practice only equalled by that of mixing corrupt butter with best cream butter.

The cattle that provided these byproducts and the sheep that yielded the "golden fleece" as well as swine were driven to market on the hoof, usually along routes probably so well established that they followed lines known to drovers from prehistoric times. They naturally came from all the districts

from which butter and cheese were brought. The sheep and the pig were ubiquitous, and supplies of mutton, bacon, and pork could be obtained from almost every part of the country, although some parts were more famous for these animals than others.

The Home Counties were adepts at grazing, the marshes of Essex and the drier lands of Hertford both being used for the purpose, and they were also employed in feeding calves for the London butchers.<sup>104</sup> Surrey, Sussex, and Kent added to the supply. Cattle, sheep, and pigs were sold at Guildford market,<sup>105</sup> while John Taylor on a voyage down the Thames picturesquely described the journey as driving "twixt Essex calves and sheep of Kent,"<sup>106</sup> and Evelyn was astonished to see in London a Goliath of an ox which had been bred in the latter county.<sup>107</sup> All the country of the Midlands, the Vale of White Horse down into Wiltshire and northwards supplied cattle for the market, but the Vale down to Cricklade had a special reputation with the butchers for good fat beasts.<sup>108</sup>

East Anglia not only bred beasts for the market but imported Scotch animals for fattening. One small village not far from Lynn had a large fair for the disposal of the Scots,<sup>109</sup> and these animals were also sold at Malton in Yorkshire on their way south.<sup>110</sup> There was a fair-sized trade in Scots cattle throughout the century, and the tax records of Carlisle show that 318,574 passed through that town in 1662. Some restriction on this trade probably resulted from the act in the following year which imposed a heavy duty on cattle imported between August 20 and December 20.<sup>111</sup> Both bought-in and locally bred cattle were sent to London from Suffolk and many droves of swine as

<sup>104</sup>John Mortimer, *The Whole Art of Husbandry* . . . , 166 ff. (London, 1707).

<sup>105</sup>Judges, *In and Around Guildford*, 2.

<sup>106</sup>John Taylor, *The Praise of Hemp Seed*, E 1 (London, 1620).

<sup>107</sup>*Memoirs of John Evelyn* . . . 1641-1705-6, ed. by William Bray, 2:7 (London, 1827).

<sup>108</sup>Aubrey, *The Natural History of Wiltshire*, 37.

<sup>109</sup>D. H. Atkinson, *Ralph Thoresby, the Topographer; His Town and Times*, 1:94 (Leeds, 1885).

<sup>110</sup>Robert Davies, ed., *The Life of Marmaduke Rawdon of York*, 145 (Camden Society, no. 85, Westminster, 1843).

<sup>111</sup>Theodora Keith, *Commercial Relations of England and Scotland, 1603-1707*, p. 8, 94-95 (Cambridge, 1910).

<sup>97</sup>*Ibid.*, [v. 7], 1634-35, p. 197; [v. 11], 1637, p. 522.

<sup>98</sup>Thomas Gerard of Trent, *The Particular Description of the County of Somerset*, ed. by E. H. Bates, 172 (London, 1900).

<sup>99</sup>William Chapple, *Review of Risdon's Survey of Devon* . . . , 26-28 (Exeter, 1785).

<sup>100</sup>R. H. Tawney and Eileen Power, *Tudor Economic Documents*, 1:167 (London, 1924).

<sup>101</sup>R. M. Heanley, *The History of Weyhill, Hants, and Its Ancient Fair*, 36 (Winchester, 1922).

<sup>102</sup>C.S.P., D.S., . . . Charles I, [v. 3], 1628-29, p. 215.

<sup>103</sup>*Ibid.*, [v. 7], 1634-35, p. 290; [v. 11], 1637, p. 313.

well.<sup>112</sup> The cattle of Yorkshire were probably collected by the drovers who were going south with Scots and may have been bought at Kilham fair on All Saints, which was a great sheep fair between Holderness and the Wolds.<sup>113</sup>

The southwestern counties were great grazing counties, and cattle and sheep were driven fat to London from Dorset,<sup>114</sup> the Vale of Blakemore being especially noted for excellent dairy cows, but sending out oxen and pigs as well,<sup>115</sup> while in 1621 Somerset was complaining that the importation of Irish cattle had decayed their trade.<sup>116</sup> Cornwall did not fully utilize its own pastures, and the graziers of Devon and Somerset leased the land and stocked it with their own cattle.<sup>117</sup> Devon was so successful at the business indeed that on one occasion in 1625 it was able to send 500 oxen to Ply-

<sup>112</sup>Reyce, *Suffolk*, 37, 38.

<sup>113</sup>Best, "Rural Economy in Yorkshire in 1641," 30.

<sup>114</sup>Coker, *A Survey of Dorsetshire*, 3.

<sup>115</sup>A. R. Bayley, *The Great Civil War in Dorset, 1642-1660*, p. 10 (Taunton, 1910).

<sup>116</sup>C.S.P., D.S., . . . *James I*, [v. 10], 1619-23, p. 291.

<sup>117</sup>Carew, *The Survey of Cornwall*, 5.

mouth for the navy.<sup>118</sup> Wales also provided cattle and sheep for English markets, but this trade has already been closely described and need occupy no space here.<sup>119</sup>

Some doubt has been expressed whether there was much trade in horses,<sup>120</sup> but one writer thought it unnecessary to give advice on horse breeding because not only coach horses, but all kinds for wagon, cart, and plow could readily be purchased at the fairs or from the horse coursers.<sup>121</sup> Amongst these fairs that of Evesham was of good repute, and the horses sold there were "often preferred from the Cart and plow to the Court and the tylt. . ."<sup>122</sup> Amongst the Welsh counties Radnor and Pembroke were famous for their horses.<sup>123</sup>

<sup>118</sup>*Diary of Walter Yonge, Esq.*, ed. by George Roberts, 81 (Camden Society, v. 41, London, 1847).

<sup>119</sup>See Caroline Skeel, "The Cattle Trade between Wales and England from the Fifteenth to the Nineteenth Centuries," Royal Historical Society, *Transactions* (ser. 4), 9:135-158 (London, 1926).

<sup>120</sup>Ernle, *English Farming Past and Present*, 183 (ed. 5, London, 1936).

<sup>121</sup>Richard Blome, *The Gentleman's Recreation* . . . , 2:2 (London, 1686).

<sup>122</sup>Thomas Habington, *A Survey of Worcestershire*, ed. by John Amphlett of Clent, 2:75 (Oxford, 1899).

<sup>123</sup>Davies, *The Economic History of South Wales*, 60.

## HOG RAISING AND HOG DRIVING IN THE REGION OF THE FRENCH BROAD RIVER

EDMUND CODY BURNETT

A common nickname for the State of Tennessee has long been "The Hog and Hominy State" and for the best of reasons. For more than three-quarters of a century the State's principal farm crop was corn and its principal product hogs. By 1840, when the State was scarcely fifty years old, it had taken rank as the first corn-growing State in the Union, and ten years later it held the rank of the first hog-producing State. Its hogs were marketed principally in the cotton-growing States, and, until railroads supplied transportation facilities, the markets were reached mainly by driving the hogs on foot. This was particularly true of East Tennessee and of some part of Kentucky as well. Nowhere else, so far as I have been able to discover, was the driving of hogs from farm to market practiced on so large a scale for so great a distance and for so long a period. I speak of hogs only, for though the drive at times in-

cluded horses, mules, cattle, sheep, and even turkeys and ducks, hogs soon came to be far and away the most important item of the traffic. Unfortunately only the scantiest records of this traffic have been preserved, and they are for the most part incidental notes of travelers.

That the settlers west of the mountains in what is now eastern Tennessee and Kentucky would make use of the vast open ranges for the raising of livestock was a matter of course. The extent to which the business could be developed naturally depended on finding a market for the animals. Over the mountains in the Carolinas and Georgia was a ready market, but reaching it involved a long, rough, tedious, and toilsome journey. However, the enterprising inhabitants of Tennessee's rich valleys were not deterred by such obstacles.

There are evidences that the movement of livestock eastward over the mountains had begun by



1796 when Tennessee entered the Union.<sup>1</sup> In July 1795, Governor Arnoldus Vanderhorst of South Carolina proposed joint action on the part of his State and the Southwest Territory in laying out and improving a road to Buncombe Courthouse, from Greene County to Warm Springs and up the French Broad River. Commissioners were appointed for the purpose, but before they could report Tennessee had begun to function as a State with John Sevier as governor. Through him the project was pressed upon the Tennessee legislature, although, it would seem, without avail.<sup>2</sup> Meanwhile, the existing road along the river, such as it was, was already being used for stock driving. On November 10, 1800, Bishop Francis Asbury noted: "We took up our journey and came to Foster's upon Swansico (Swannanoa)—company enough, and horses in a drove of thirty-three."<sup>3</sup>

Although there were a few other possible passages through the mountain barrier, the French Broad gorge offered by far the most practicable route. By the end of the first quarter of the nineteenth century, the road along the French Broad had become so congested with droves of stock that efforts were made to relieve the congestion by building other roads, but with small success. Of greater value was the improvement of the French Broad road. In 1824 the North Carolina legislature incorporated the Buncombe Turnpike Company, and three years later a new turnpike beside the river, said to be the finest in the State, had been completed.<sup>4</sup> The result was

"a stream of travel through western North Carolina."<sup>5</sup>

Nearly a quarter of a century later, a traveler, while rambling about the southern Appalachians, made a trip from Asheville to Patton's Warm Springs and Painted Rocks, and described his journey in part as follows:

When it is remembered, too, that the air is constantly heavy with the fragrance of flowers, and tremulous with the perpetual roar of the stream, it may be readily imagined that a ride down the French Broad is a unique pleasure. Back of the river on either side the country is hilly and somewhat cultivated, but its immediate valley contains nothing that smacks of civilization but a turnpike road, and an occasional tavern. This road runs directly along the water's edge nearly the entire distance, and, on account of the quantity of travel which passes over it, is kept in admirable repair. It is the principal thoroughfare between Tennessee and South Carolina, and an immense number of cattle, horses, and hogs are annually driven over it to the seaboard markets. Over this road also quite a large amount of merchandise is constantly transported for the merchants of the interior, so that mammoth wagons, with their eight and ten horses, and their half-civilized teamsters, are as plenty as blackberries, and afford a romantic variety to the stranger.<sup>6</sup>

Even by 1827, when the turnpike was finished, the hog traffic had grown to immense proportions; all else was but a trickle, particularly in the hog-driving season. It was no longer a question of marketing stock grown on the open ranges; farmers of the rich lands along the rivers and in the valleys of East Tennessee in particular were raising immense crops of corn, feeding this corn to hogs, and selling the hogs in South Carolina and Georgia to supply the demand of cottongrowers for meat. To a considerable extent mules were also grown for the same market and driven over the mountains, some farmers making a specialty of the mule business, as did some drovers. But every farmer grew corn and fattened hogs. To

been unable to learn. Jesse (J. W. D.) Stokely, whose recollections are embodied in the account to follow, says there was a toll gate at Marshall and one at Asheville, and he thinks there was at one time a toll gate at the Stephen Huff place or the John Huff place, 2 or 2½ miles below Big Creek. It is his recollection that the toll for each head of livestock was 1 cent and for a man and horse 15 cents.

<sup>5</sup> Sondley, *A History of Buncombe County*, 2:617.

<sup>6</sup> Charles Lanman, *Letters from the Alleghany Mountains*, 123 (New York, 1849).

<sup>1</sup> Forster Alexander Sondley, *A History of Buncombe County, North Carolina*, 2:618 (Asheville, 1930).

<sup>2</sup> This information has been kindly furnished me by Judge Samuel C. Williams of Johnson City, Tennessee. For the presentation of the project to the Tennessee legislature on Apr. 1, June 7, and Aug. 2, 1796, see Samuel C. Williams, ed., "Executive Journal of Gov. John Sevier," East Tennessee Historical Society, *Publications*, 1:101, 109, 117 (Knoxville, 1929).

<sup>3</sup> Bishop Asbury, who made numerous trips over the mountains between 1800 and 1813, recorded many lively notes on the conditions of life and travel along the French Broad in his journal. Pertinent extracts are found in John Preston Arthur, *Western North Carolina: A History (from 1730 to 1913)*, 215-223 (Raleigh, 1914); and Sondley, *A History of Buncombe County*, 2:676-685. Captain Thomas Foster, frequently mentioned in Asbury's journal, established himself where Biltmore now is in 1796. See *ibid.*, 2:618.

<sup>4</sup> The turnpike, being a corporate enterprise, maintained itself by means of toll charges. Whether the records of the turnpike have survived, this writer has

haul his surplus corn to distant markets was too costly, but, if the corn was loaded on hogs in the form of fat, the hogs would themselves furnish the needed transportation.<sup>7</sup> The people of the Whiskey Rebellion had the same economic problem, but they solved it in a different way.

The traffic on the Buncombe Turnpike between Asheville and Warm Springs at mid-century as compared with forty years later is noted in the following statement:

The road, with a few points excepted, is but a wreck of its former self. It was once a great connecting link between Kentucky, Tennessee, South Carolina and Georgia, and the travel over it was immense. All the horses, mules, cattle, sheep and hogs were driven over this route from the first mentioned States to the latter, and the quantities of each and all used then was very much greater than now. In October, November and December there was an almost continuous string of hogs from Paint Rock to Asheville. I have known ten to twelve droves, containing from 300 to one or two thousand stop over night and feed at one of these stands or hotels.<sup>8</sup>

The cotton-growing South furnished a market for mules as well as meat, but mule driving from East Tennessee never attained the proportions that hog driving did. Mule driving was but a passing incident, whereas hog raising and hog driving were the warp and woof of the life of the times. Hog driving was the red corpuscles of the economic blood stream. Moreover, mule driving never caught the popular imagination as did hog driving. It was hog driving only that came to be celebrated in song and story. As for the impressions left upon the dwellers by the wayside, the mule drover's "co-o-ope! co-o-ope!" as he tolled his drove of mules after him was utterly lacking in the appealing resonance that characterized the

hog driver's call, "ho-o-o-yuh! ho-o-o-yuh!" While the drove was yet far off, the call resounded across the valley, rousing a throbbing expectation as it drew nearer and nearer, and held fast to the imagination as it receded into the distance and at last died away with only a faint echo.

The hogs were started to market only after they had consumed the grower's surplus corn and had been fattened sufficiently to be butchered. The fattening began as soon as the corn was sufficiently mature to feed, which was about the middle of August, and reached the finishing stage in late October or early November, or at the latest in the beginning of December. Accordingly, the driving season was concentrated mainly in November. Then the droves followed one right behind another all the way up the French Broad River to Asheville and even beyond. It is said that at one period as many as 150,000 to 160,000 hogs passed through Asheville in a single season.

Just when the hog-driving business, apart from the hog-raising business, attained its peak, it is impossible to determine without definite statistics. A compiler, who gathered materials for a gazetteer in 1832 and 1833, recorded: "In East Tennessee, considerable attention is paid to the raising of cattle, horses and hogs, which are driven over the mountains to the Atlantic country for sale." Respecting Cocke County he said: "The staples are cotton, corn, wheat, rye and hemp. Corn is the principal, which is fed to stock and driven to market. It is estimated that five thousand head of hogs are annually driven from this county to the southern market."<sup>9</sup>

Another compiler whose work was published in 1842, observed that "Tennessee is the greatest Indian Corn growing State in the union" and cited the census of 1840 to substantiate the statement.<sup>10</sup> Concerning the staple marketable productions of the State he added: "Horses, Mules, Hogs, Flour, Cotton, Tobacco, Silk, Whiskey, Peach-brandy, Dried Fruits, and Feathers. The Stock is sent in the winter months over the mountains to South Carolina, Georgia, Alabama, and Florida." Touching the region with which this narrative is particularly concerned the same writer noted: "On the Bottom Land of the French Broad River

<sup>7</sup> The same economic principle lies at the bottom of the gag once aimed at East Tennessee and western North Carolina. The visitor from the lowlands asks: "How do they get the corn down from those steep hill-sides?" Replies the native, "We bring it down in a jug." Sondley, *A History of Buncombe County*, 2:665, says: "The business of thus driving stock continued, though in decreasing volume, until about 1870, when it ceased." He should have said 1880.

<sup>8</sup> James M. Ray, "Reminiscences of 40 Years Ago," in *The Lyceum* (Tilman R. Gaines, ed.), published in Asheville, December 1890, quoted in Arthur, *Western North Carolina*, 286. See also Sondley, *A History of Buncombe County*, 2:617-623.

<sup>9</sup> Eastin Morris, *The Tennessee Gazetteer, or Topographical Dictionary*, vi, 34 (Nashville, 1834).

<sup>10</sup> J. Gray Smith, *A Brief Historical, Statistical and Descriptive Review of East Tennessee, United States of America*, 2, 8 (London, 1842).

from Newport to Dandridge, a distance of from twenty-five to thirty miles, by its meanderings, and probably averaging half a mile on each side of the river, from 20 to 30,000 hogs are annually fattened for market, exclusive of Horses, Mules, and Cattle."

In 1840 when the first agricultural census was taken, Tennessee was the foremost State in the production of corn and stood first in the production of both corn and hogs a decade later.<sup>11</sup> By 1860 the State had declined relatively in both respects, although not absolutely. There was necessarily a marked decline during the Civil War but a mighty resurgence of the business took place when the war had closed. In 1872 the State was classed as seventh in the production of corn and fifth in the production of hogs; but that decline was largely relative as compared to States of the Mississippi Valley.

To this observer, who chanced to occupy through one flourishing decade of hog driving a choice seat in the grandstand, so to speak, from which he viewed the surging parade of hogs as they were gathered from far and near, ferried over the river, and funneled into the channel of the French Broad, it did seem as if all the world were hogs and all the hogs of the world had been gathered there, destined for the Carolina slaughter pens and the cotton-growers' smokehouses. I say that I "chanced" to have the privilege of an especially favorable post of observation; but was it chance? So it then seemed, but sometimes since, I have come to wonder.

The element we call chance oftentimes turns the course of our lives this way or that just as the too solid rock at the great bend of the Tennessee River deflected its course far to the northward, whereas, had the rock been a little softer, the river might have plunged onward directly to the Gulf of Mexico. And so the present scribe is prone to believe that, if the hog-driving business had not flourished about 1830 along the course of the French Broad River where the streams of hogs were focused for the final drive to their doom, he might have been born a Tarheel and been stuck in Buncombe County, North Carolina, for better or for worse.

<sup>11</sup> Tennessee Department of Agriculture, *First and Second Reports of the Board of Agriculture for the State of Tennessee; Introduction to the Resources of Tennessee*, by James B. Killebrew . . . , 129, 138, 436, 484-487 (Nashville, 1874).

In 1834, my grandfather, Swan Pritchett Burnett, acquired a considerable amount of land about the mouth of Big Creek some fifty-odd miles down the river from Asheville and removed thither the following year. His first acquisition in the valley had, in fact, been made some two or three years earlier on the north side of the river about a mile below Wolf Creek. His chief inducement to that purchase, so I have been informed, was its value as a hog stand. Having lived most of his adult life hard by the town of Asheville, he no doubt had an intimate knowledge of the great droves of hogs that passed through Asheville every autumn on their way to the Carolina markets and hence had his attention called to the particular spot where these thousands of hogs were gathered to begin their toilsome journey through the French Broad gorge. Thither came his eldest son, William Claudius Burnett, to take up his residence. That my grandfather's interest would immediately turn to the productive lands of the valley as a source of the corn needed to feed the passing droves, and herds of his own raising as well, was inevitable.

By the time, however, that this grandson had become old enough to take note of passing scenes, the French Broad River had gone on a rampage in 1867 and washed away that part of the turnpike that lay below Warm Springs, now Hot Springs. The new road to replace the destroyed turnpike was of necessity built on the south side of the river, although from Wolf Creek to Warm Springs it did not follow the river but went up that creek and over the hills. Since all travel from down the country had to approach the river from the north, a ferry became necessary, and the logical place for such a ferry was at Big Creek, 5 miles down the river from my Uncle William's stand. Big Creek, now known as Del Rio, was central to the whole valley and soon had a railroad, a station, a post office, a school, and a church, to say nothing of the other appurtenances and habiliments of a community center.<sup>12</sup> So it came to pass that the ferry was established hard by the schoolhouse, that the schoolhouse looked out upon the ferry, and that thereby a certain small boy had bestowed upon him an ideal observation post.

Indeed, as the schoolhouse was strategically

<sup>12</sup> For the geographical setting of Big Creek and the advent of its railroad, see this writer's article, "The Railroad Comes to Big Creek," in a forthcoming number of the *Railway and Locomotive Historical Society's Bulletin*.



situated equidistant from the ferry and the railroad, times were seldom dull within or without its walls. If one had a seat near one of the windows overlooking the river, one could watch the whole progress of the ferryboat, as it moved back and forth across the river. However, except in hog-ferrying time, a seat affording a lookout upon the railroad was greatly to be preferred. The depot was only a hundred yards or so down the track, and, when "Old Buncombe," the mighty engine, made its daily trip up the road from Morristown to Wolf Creek, that marvel of marvels stopped and stood awhile right opposite the schoolhouse. On the return trip we could see only the mammoth engine moving slowly down the road till it disappeared beyond the depot, but that sight also was well worth the price of admission.

Fortunately—although to tell the truth at a distance of three-quarters of a century and more I cannot be sure whether it was wholly good fortune or partly purposeful intrigue—during the hog-driving season, I sat where I could always keep one eye on the ferry. One eye was enough anyway for Webster's blue-backed speller and Smith's primary grammar. Believe it or not, these observations began when I was not yet four, for I was enrolled in school at the age of three. Such, I think, was the record, although strictly speaking I was "going on four." At the time I was even too young for a kindergarten, but let me remind the critics that the kindergarten was then only in its experimental stage even in that center of education and culture called Boston.

The hog-driving season was from about mid-October to mid-December, that is, from the time the drove started from somewhere down the country to the time of its arrival at the end of the drive. During November our ferry was used daily and sometimes the whole day through. There were times, in fact, when the droves, awaiting their turns at the ferry, were backed up the road for several miles. As soon as a drove came through the gap in the ridge about a half mile distant across the river, we could hear the "ho-o-o-yuh! ho-o-o-yuh!" of the drivers, and sometimes we could hear the crack of their whips, both sounds increasing in volume to the eager ears at the schoolhouse as the drove drew nearer the ferry. There were times when these sounds, from away beyond the gap, came straight across a bend in the river to our house, more than a mile distant, to play delightfully on my eardrums.

This was particularly true of a night I well remember when a drove was overtaken by darkness 2 miles or more from the ferry. The John Huff place and the Stephen Huff place (the old Huff's Fort) were already full up, consequently this drove had to trudge on to Americus Jones' house near the ferry. I could hear an unending stream of "ho-o-o-yuh! ho-o-o-yuh! ho-o-o-yuh!" mingled with the resounding crack of whips, as the drivers sought to prod the weary hogs a little farther, a little farther, to where they could be lotted and fed.

If you have never heard the hog driver's word of command, and probably few of you ever have, you should know that the first syllable is like a prolonged wail, while the last syllable is hurled out with a snap and a thud, much like the exclamation one might make if suddenly hit in the solar plexus. At nightfall the voice of the driver and the crack of his whip were probably necessary to keep the hogs moving, but I always had a notion that in daytime it was mostly the driver's way of keeping himself company. The days must often have seemed long and awfully lonely with nobody to talk to but the hogs.

I probably once knew, but have long since forgotten, how many hogs could be ferried over at one time. My present guess is about fifty. Later when I had seen big ferryboats farther down the river, I realized that ours was a comparatively small affair. In another particular I discovered that we were behind the times. In the beginning there was no wire cable stretched from bank to bank, although according to my recollections it was installed quite early. Before the installation of the cable, or when it was down as happened every now and then, the boat was propelled by poles. When the river was low two men could easily manage the boat, although a certain skill was requisite to keep it at the proper angle. With the cable installed, the boat was pulled across the river by hand. With the river low and the load light, one man might be able to manage the boat; but if the current were strong and the load heavy, it was as much as two men could accomplish, and usually there were three pairs of hands pulling hand over hand on the cable. Later when I saw ferryboats operated by means of adjustable pulleys whereby the current of the river was utilized as the propelling power, I wondered why our folks had not adopted that device. I am still wondering why. Perhaps



it was because the river was not very wide, and there were usually plenty of hands.

For ferrying hogs or cattle movable railings were set up at each side of the ferryboat with gates at each end, making an enclosed pen. As a rule the hogs were perfectly content to remain quietly in the pen until the river was crossed, but now and then a hog, who had not been wholly subdued by his fattening-lot schooling or who was not sufficiently restrained by the load of fat he carried, would plunge over or through the railing into the river. Usually a canoe was kept at the side of the boat for such an emergency; if not, there would be one at one or the other of the landings, and two men would jump into the canoe and go after that hog with all possible speed. One man would grab him by an ear and hold his head above water, while the other managed the canoe. Once in a while a hog would be drowned before he could be rescued. Then a hurried butchering followed, and some of us would have backbones or spareribs for supper. At such a time I would be reminded of the story in the Bible about the herd of swine that rushed headlong into the sea. "If," I reflected, "Satan should decide to go the whole hog and enter into that whole ferryboat full of hogs, there would be as big a drowning as the Bible tells about." But my sympathies were all with the hogs, not with Satan.

How many thousands of hogs crossed the French Broad River at the schoolhouse in the ten years or so that I was looking on, I can only guess, but they must have averaged more than 100,000 a year. That's a lot of hogs, and when I look at the figure I can scarcely believe that I ever saw so many. Yet most of the hogs that passed through Asheville had previously crossed the river at our ferry.

At recess time most of us ventured as near to the ferry landing as we dared, or as the crowds of hogs permitted, to get a closer view of what went on. A special part of our playground was the strip between the road and the river. It was a sort of natural park with grapevine swings and sycamore trees with limbs just the right height for gymnastic exercises, such as shinning the pole and skinning the cat. In this part of our playground the hogs from the ferryboat were parked until the remainder of the drove was ferried over.

These observations of hog driving—or, more accurately, of hog ferrying—from the schoolhouse window and thereabouts were reinforced and

enlarged little by little by observations from other vantage points, by sundry experiences, and by bits of information gathered here and there. One of the things I learned very early was that these hog droves came from far as well as near. Many of them came from around Newport or other parts of our county, some from farther down the river in adjoining Jefferson County, an occasional drove from Greene County just north of us, and some of them from more distant counties. I remember well our surprise when we were once told that a drove had come from far-away Kentucky.

Many of my intimate contacts with the hog-driving business grew out of the fact that our neighbor, Charles Stokely, was a drover for about thirty years. The days when he gathered hogs preparatory for a drive were days of eager excitement. The hogs were lotted just across the creek from our house, and I could see much and hear most of what went on over there. While Stokely raised many hogs himself, to make up his drove he bought most of the hogs in our community. One of my thrilling experiences was to watch the weighing up of our hogs, and, as soon as I was big enough, to help drive them to the assembly lot.

One year Stokely did not go driving himself, and a man named Bryson Walls took his place. The afternoon before the drive was to start, Walls assembled his drove in a lot of ours, and one small incident has remained indelible in my memory. A man who lived somewhere in the edge of the mountains stepped up to Walls and asked: "Do you need another man? I'll go for \$12." "Yes," said Walls, "I need another man, but the pay is \$13. Have you got a good strong pair of shoes?" He looked down at the man's feet and appeared to be satisfied on that point. "You'll need two pairs of heavy socks," Walls added. The man replied, "I'll go right home and get them and be back early tomorrow morning." Thereupon he moved briskly toward the road, climbed the fence, and strode rapidly up the creek. The hiring had been done in less than 3 minutes. The next morning at daybreak the man was at the lot, and I could not help but notice that he wore a perfectly new and immaculately white pair of woolen socks. A bulge in his coat pocket told me that he had not failed to comply with Walls' advice to provide himself with an extra pair of socks. It was my guess that the man's wife had spent most of the night knitting those socks. As a historian, addicted—though at times with

genuine sorrow—to the verities, I am bound to record here that, by the time the drove had reached the highway, those clean white socks were no longer either clean or white, for those hundreds of hogs had churned the lot into a loblolly of mud shoemouth deep. The wage stipulation, be it understood, was a monthly wage “and found,” which is to say, it included board and lodging both ways.

The drover always paid for his purchased hogs from the proceeds of his sales. Soon after Walls had reached South Carolina, news came back that he was losing money heavily. When Walls returned, I sat in—rather, stood by—at the settlement between him and my father. It was on a Sunday, immediately after church service; and no doubt Walls had chosen that day to make his settlements in our community because he could catch a good many of his creditors at church. Walls and my father took their seats—rather, “hunkered down”—on the depot platform. Thereupon Walls took from an inside pocket a pocketbook stuffed with bills, counted out a quantity of them and handed them to my father, making some remark about his losses. My father counted the bills, then detached one bill and handed it back to Walls with the remark, “I’ll share your loss this much.” As they were separating, another creditor came up, and there was another settlement, in the course of which Walls remarked: “Jesse was sorry for me 10 dollars’ worth.” Just then I found it incumbent upon me to trot along to catch up with my father going home, so that I failed to hear how much was the measure of the other man’s sorrow.

It was in 1877, I think, that I passed through one of the most poignant experiences of my entire boyhood. Jesse (J. W. D.) Stokely and I had always been “unco pack and thick thegither,” and one day he told me he was going with his father on the next drive, which was to start not many days thereafter. The wish that I might go too began to swell in my bosom, and it grew and grew hour by hour and day by day. On the day before the drive was to start, when Jesse rode over on the fine riding horse his father had provided for him with a brand new saddle and bridle and a new outfit of clothes, including shiny-top boots, that wish came right up into my throat and choked me. Eleven years old and past and small for his age (I was—and still am—15 months older), Jesse looked little bigger than a horsefly perched atop that high horse, but, accustomed to

ride horseback for at least 9 of those 11 years, he sat on his horse superbly and proudly—as proud, I ween, as a young peacock with a new tail. I, on the other hand, felt all the abasement and shame, said to be the mood of the peacock whose beautiful tail feathers have been plucked to make a fly brush. He was about to go on a thrilling and glorious journey, one that filled my imagination to bursting. So intense was my yearning to join my companion on the expedition that I fought down my doubts and hurried to my father to beg him to let me go a-driving for this once. Very gently and with a wholehearted sympathy that was evident to me even then, my father pointed out that this time it was impracticable. Furthermore, a lot of preliminary preparations would be required. Some other time, maybe.

And so, about sunrise next morning I watched the hogs driven out of the lot in bunches of about a hundred. As a driver took his place behind each bunch as they moved slowly into the road, he called out the customary “ho-o-o-yuh! ho-o-oyuh!” and cracked his whip. Not every driver took pride in his voice, though some of them seemed eager to start, the echoes from the nearby hillside, but every driver seemed to be proud of his whip. The whip had a short stout stock, wound artistically with a leather strap, and a long plaited leather lash terminating in a cracker, a narrow strip of tough leather. A skillful manipulator of the whip could not only make it talk with a resounding thwack but could produce a pretty good imitation of a clap of thunder. There is no room to doubt that a combination of the driver’s voice and whip impelled a lazy sluggish hog to quicken his pace. All this I looked upon in a mood of deepest depression, until drove, drovers, and drivers were out of sight and sound. Then sadly I turned to other things. That evening Jesse’s father came riding back, having left his drove at Wolf Creek for the night. For me it meant a new stirring of my desire and a consequent deepening of my disappointment.

I have long carried the impression that my young comrade rode away that day mounted and accoutered as I first beheld him. But he tells me that my memory is in error. Actually he took his place behind his allotted hundred hogs on foot, cracking his whip just as the other drivers did. However, his horse, led by his father, did go all the way to South Carolina, so that he could gayly and proudly ride home again.

For my much envied companion this was the

first of five expeditions in the years 1877-1881 from Big Creek, Tennessee, to Anderson, South Carolina, in the course of which he became intimately acquainted with the methods and customs of the hog-driving business, with the stands and taverns along the way, with the people who dwelt along that busy thoroughfare, and with many of the professional drovers. Of the numerous drovers of our county and the neighboring counties in that period he is the only survivor. What is more, always a keen observer and possessing an extraordinarily retentive memory, with mind still alert and active, he has brought down to his eightieth year a moving picture of the journey, with its varying scenes and incidents sharply etched to the last detail. It is his recollections, therefore, that make up a large part of this story. Another of our county drovers, McCauley Susong, a young man when he first engaged in the business in the late seventies, passed away a few years ago when about eighty-five.

For me that "other time" never came. Instead, I went away to Carson College, where other vistas, new, strange, and immensely appealing, opened up before me. The vista of a journey to the Carolinas astride a horse, wending my way slowly along the windings of the French Broad River and over the mountains, dimmed and dwindled and was blown away.

In the interval, nevertheless, I did once go hog driving, although the drive was on a minor scale and not to be compared with the great drives to South Carolina, either in distance, time, or thrilling interests. My father had bought a bunch of 40 or 50 shotes on Pigeon River, to be assembled on a farm then owned by Stephen A. Burnett and at the present time in the possession of his brother, Charles Edward Burnett, better known as Ed. C. Burnett.<sup>13</sup> The drivers in this instance were three in number, namely George Brooks, our principal tenant, my elder brother,

C. T. Burnett (Tommy), and myself. We took the train to Newport and walked the mile or so to the farm where we spent the night.

Early next morning we set out with our drove of shotes. Our only road, unless we were to cross Pigeon River twice, the French Broad twice, and swing around a semicircle, lay up Pigeon River and Sweetwater Creek to the foot of Hall's Top, thence over the mountain by Low Gap, then down Lamb's Fork of Big Creek. The drive was not particularly eventful and its reservoir of memories neither deep nor wide. Yet a few of our experiences remain sharply etched in memory. Near the foot of the mountain was a distillery (alias still-house)—a legitimate one—and George Brooks suggested that we go in and take a swig of still beer. He went first and came back wiping froth and bran from his red whiskers. Tommy went next and returned wiping his mouth and smacking his lips. Then came my turn, imagination and anticipation each buoying the other. George told me how to get my swig. "Take a quill," he said, "stick it down in the vat, and jist suck." I found some joints of reed of different lengths lying near, and I picked up a short one indifferently. I thrust it into the vat and sucked. I guess I sucked pretty hard, for my mouth and throat were so filled with wet sour bran that I was choked. It took a lot of coughing and hawking and spitting to get that bran out of my throat. And that was my sole lifetime experience with still beer.

One little incident, as we climbed the steep winding road up the mountain, furnished my brother with gurgles and chuckles for a month. Perched on the side of the mountain, 60 to 100 yards from the road, was a cabin, and, as we drew near the house, a woman and half a dozen small children appeared in the doorway. The woman spoke to one of the small boys, in a tone loud enough for us to hear her, "Run down an' ax the man efn he's got any er terbacker." My brother, not then addicted to the "filthy weed," although in later life an inveterate smoker, was ready when the boy drew near and put his question: "Maw axes efn you'unses has got any er terbacker." "Just a few crumbs," said my brother, and thereupon emptied into the outstretched hands of the boy all the dirt and chaff

<sup>13</sup> The adoption of this reverse signature by my esteemed relative laid the foundation for considerable confusion with myself—with no compensating benefits that I ever discovered. To be sure, he had his reason, a sort of proverb or maxim then (and still) current in East Tennessee: "No man who parts his hair in the middle or uses his middle name in his signature will ever be worth shucks." The saying is attributed down our way to Andrew Johnson, promulgated at a time when Johnson's words carried a lot of weight. Very likely the great Andrew subsequently repented of his rash pronouncement, just as it is confidently believed in

some quarters that Abraham Lincoln must turn over in his grave every time somebody bellows "Don't swap horses while crossing a stream" and pins the saying on him.



and hayseeds that had accumulated in the pocket of his old barn coat through an entire winter. My brother carefully watched the boy empty his hands into those of his mother. But just then a turn of the road took us out of sight of the house though not quite out of hearing. We could hear a grumbling and a growling, though the precise words were indistinguishable.

One of the rewards of this trip was the wonderful view from Low Gap, wonderful to me, for up to that time I had never seen anything equal to it. It was a genuine thrill to seize nearly the whole of our little valley with one glance of the eye. It was the view to the westward, however, that gave me a feeling akin to awe. Spread before me was a panorama of fields, woodlands, winding streams and roads, many square miles of them, stretching into dim distances and halted only by that misty fringe called the horizon.

How much, if any, this experience had to do with inspiring my brother to undertake the great hog-driving venture, I do not know, but three or four years later that is just what he did. Having attained his majority and flush with an eagerness to find a new world to conquer, he joined with Joseph Huff, senior partner in the mercantile firm of Huff and Company (in our language, store-keepers), in which my father was the "Co." or silent partner. The expedition set off bravely and hopefully, as always, and successfully reached its destination, some town in northern South Carolina, I am not sure which one. There, they soon discovered, something had happened to the market. Prices were not quite what they had expected, and sales were slow. It became speedily clear that their venture would net them a loss, whether large or small would be determined by events. It was depressing news to my father, and each successive letter from my brother but served to deepen that depression. Although only in my early teens, I could not escape the atmosphere of pessimism that thickened around me.

One factor, I presently learned, a factor quite outside any previous calculations, had added very materially to their losses. There was an unwritten code among the drovers that one drover should not invade another drover's territory and in particular that he should not undercut the prices at which the other drover was offering to sell. The code sometimes worked both ways, though not always. Our community drover, for instance, Charles Stokely, throughout the thirty years he was in the business

sold his hogs only in Anderson, South Carolina. There his association with the buyers was one inspired by confidence, friendship, and honorable dealing. The few attempts to beat Stokely to his market were utterly unsuccessful. The buyers would reply to such a proposition: "We buy our hogs from Charles Stokely." And that was the conclusion of the whole matter. While my brother and his partner were endeavoring to sell their hogs, another drover ran his hogs into the town by rail and threw them on the market at a cut price. The result was that everybody lost money fast.

My brother's return from his venture is an exceptionally clear-cut memory. It was late at night when he reached home. My father was surprised, even shocked. "You ought never," he said, "to have ridden down that river in the night with all that money." Just how much "all that" was I suppose I did not try to figure, but the two partners between them doubtless carried several thousand dollars. Banking facilities in those days were practically nil in our country, so that drovers customarily returned with the proceeds of their sales in their pockets. Though they offered a most attractive bait for highway robbery, I never heard of one of them being held up.

The hog-driving season, as I have mentioned, was of short duration. During those hectic weeks hogs would come and hogs would go, and betwixt the varied noises of their comings and goings, those of us who were pursuing the three R's and the like could scarcely hear ourselves get the dictionary lesson. But we liked it that way. The quiet that settled down over the school when the last drove had gone up the river road was oppressive. There would be no more hog driving for another year. It was like the week after Christmas.

Hog raising, on the contrary, was a task that never ended. For that, care and alertness were constants in the formula; activities, varying in form and intensity, were recurrent requisites, and now and then anxiety hovered over the herd. This was especially the case when cholera made a visitation. I have known our herd to be diminished by as much as one-half in a matter of days. Once, I recall, my father counted 20 corpses in the field on a single morning, this in a herd of about 100.

My own training in the business was of course progressive. It began when, as a child, I gleefully watched the little pigs get their meals from mammy sow, squealing and squirming and wagging their



tails and scrambling for their specially reserved places at the pig dining table. A later lesson was when a terrible squealing at the barn drew my curiosity thither, where, through a crack, I perceived that something fearful was being done to the pigs with knives and needles, the meaning of which was a still later acquisition. One thing that particularly worried me was that they cut off the pigs' pretty tails. How could they get their dinner with no tails to wag? Later still, when nimbleness of feet and legs was called for, as when the hogs had broken into a forbidden cornfield, it was I, the small boy, who was all too often assigned the task of chasing them out. Then I began to dislike hogs. If Satan would enter into all of them and make them rush headlong into the creek and get drowned, I was on the side of Satan in that job. There were, indeed, many times and occasions when the voluntary—or instinctive—conduct of the hogs would induce in either man or boy moods in which no pious thought could thrive.

In many particulars the business of raising hogs in those days was much simpler than it has since become. Before the passage in our State of what was called the "no-fence" law, livestock of all kinds was allowed to run at large. If a farmer had a considerable acreage of woodland, he might raise a goodly herd of hogs on mast (acorns, beech-nuts, and sometimes chestnuts), with very little care or expense. And if his hogs wandered off into somebody else's territory, he had little to worry about. Unfenced territory was free to all comers—provided they came on four legs. Or, they might roam up and down the creeks, where they would find some mast, but more particularly other food to their taste, such as crawfish. I have been told that some hogs even became experts at catching fish—but I am not quite sure yet whether to believe this one. Still, we had fishermen who could catch fish hidden under loose rocks, so why couldn't a hog do the same? Even people with little or no land might keep a sow, raise a litter of pigs to shote size, and then sell them to farmers who could feed them.

With hogs belonging to so many different people running loose, it was necessary that they be marked. My father had, I think, the simplest mark in our entire valley, which was a smooth crop off the right ear; that is, unless a smooth crop off the left ear may be deemed just as simple. Other marks that I became acquainted with were: half-crop, swallow-fork, underbit, overbit, hole,

slit, in one ear or both ears, singly or doubled, in almost any possible combination. A history of Buncombe County mentions all these marks as used in the years 1793–1810, and in addition, the "under keel," the "underslope," and the "hale."<sup>14</sup> Just what these latter three were I am not at all sure.

In our community there was a favorite method of fattening hogs that seems not to have prevailed over the country generally. Our method was to let the hogs gather their own corn, at least for a considerable part of the fattening period. The device was to cut off part of a cornfield with a temporary fence and just turn the hogs into this lot to feed at will. The size of the lot would depend on the number of hogs, for the amount of corn had to be just about what the hogs would clean up in a week or ten days. Corn left lying on the ground longer than that would sour. As soon as one lot was cleaned up another would be fenced off and so on till the whole field had been eaten down. My father once bought from Russell Jones, who lived at the foot of Round Mountain, several hundred rails made of young chestnut trees, expressly for this purpose. When the fattening season was over, these rails were carefully stacked up until the next season. We had plenty of timber for oak rails, but oak was heavy and prone to warp. For a good many years these chestnut rails were religiously kept for this special purpose but were eventually used for fence repairs over the farm.

There were two special reasons for employing this mode of fattening: one was to save the labor of gathering and hauling the corn; the other was that it cleared the field for wheat sowing. Another advantage, by no means negligible, was that it furnished the ground a good deposit of fertilizer. Although not one of the purposes, this method of fattening offered lessons in hog psychology not to be learned from the usual fattening lot. One can learn a lot of hog psychology by associating with hogs. It was particularly interesting to me to observe how the smaller hogs trotted around or wandered about, searching for fallen ears of corn or for leaning stalks that they could easily bring down. But not so the big hogs. The big porker,

<sup>14</sup> Sondley, *A History of Buncombe County*, 2:477–479. For a list of "Creature Earmarks" that prevailed in the town of Rehoboth, Massachusetts, in colonial times, see the *New England Historical and Genealogical Register*, October 1944.

if he did not know instinctively how to obtain the best ears of corn, quickly learned the most effective procedure. He would stride up to a standing stalk, put his nose against it, give it a gentle shake, and would know at once whether the stalk carried a light ear or none at all. If he felt weight up there, he would push hard with his nose, and if that did not bring down the stalk, he would rear up on his hind legs, put his fore feet against the stalk and push and shake it till it came down. It was all just a variation of the psychology manifested in the ordinary fattening lot, when the scramble began for the ears thrown in by the feeder or poured from a bag as he strode across the lot, struggling to keep from being tripped up as he went. The smaller hogs might not be able to get an ear till the big ones had all been supplied. But when he did manage to get one in his jaws, he would break for the most obscure fence corner in the lot, where he hoped to be able to eat unmolested. If a big hog did spot him and take the ear away, I imagine the little hog had an aggravated attack of inferiority complex. In a lot of standing corn, on the other hand, I imagined that the little hog, unable to knock down a big heavy stalk by himself, felt grateful to his big brother, who having got his own bellyful, moseyed off to the shade, leaving parts of ears unconsumed. For the later stages of the fattening process it was deemed better not to allow the hogs to take much exercise, so they were confined in a small lot.

Whatever pains and penalties, discomforts and dejections might be incident to hog raising and fattening, hog-killing time was always a time of genuine joy. In most particulars the methods of hog killing in those days did not vary greatly from place to place. However, our method of heating the water for scalding the hogs was more primitive than that which prevailed in most parts of the country. The most common procedure was to use a metal scalding vat over a furnace. Because of their abundance, we used rocks about as big as could be handled with a shovel. To heat them, a layer of wood and a layer of rocks were placed in a big pile. Some hours before the killing was to begin, usually before daybreak, the wood was set afire. The scalding barrel was sunk partly in the ground, at a convenient angle, with the mouth of the barrel even with the top of the ground. Into this barrel, filled with water, the red-hot rocks were shoveled until they set the water to boiling; then they were raked out, and the scalding was

begun. Other necessary preparations for the killing included a stout pole resting on forks, either natural forks or crossed poles or fence rails fastened together with chains or ropes, and as many stout sticks, called "gambling" sticks (gambrels), sharpened at each end, as there were hogs to be killed. These were to suspend the carcasses from the pole.

For killing the hog two methods were in vogue. One was to knock him in the head with an ax; the other was to shoot him. Where the gun was used, the hogs were allowed to ramble around in a good-sized lot, and when one was shot down he was dragged to the place of scalding, either by hand or by a horse or mule. Our household, so it seemed, never had any good marksmen, and therefore the ax was our invariable weapon. Our method required a close pen. Two men climbed into the pen, one with an ax, the other with only his two strong hands. The latter seized the hog by his hind legs and held him, while the other took careful aim with the ax and broke his skull. One or other of the men carried a long sharp knife, which he quickly stuck into the hog's throat and with a twist or two severed the jugular vein. When the hog had thoroughly bled, he was dragged from the pen to the scalding barrel, thrust in, one end at a time, till the hair would slip, then dragged out. Speedily as many men as could get around the carcass set to work with knives and rocks to scrape off the hair. When the hog had been thoroughly cleaned of hair, slits were made at the hind ankles between the main tendon and the bone, for the insertion of the gambling sticks. The hog was then lifted up, with hind legs astride the pole from beneath, the gambling stick inserted in the slits, and the carcass was hung, ready for the cutting.

It has been said that the modern packing plants utilize every part of the hog except the squeal. So far as that goes, they have mightily little on our folks. The only parts of the hog that we considered waste were the blood, the hair, and the contents of the entrails, and these, at least two of them, made good fertilizer. Though we found no ways of using the squeal, we did save the bladders. They were dried and passed around among the young folks to be blown up as balloons. In one way or another we had a lot of fun with the hog bladders, and we made a lot of noise. Actually there was very little of the hog's insides that was not used for human food. Livers, lights, sweetbreads, and kidneys were eaten as a matter of course. The entrails—commonly called in the old

English speech of our country, guts—were immaculately cleansed, then stuffed with ground meat—the scraps obtained from trimming hams and shoulders—to become that much prized article of country diet, sausage. Strung on poles in the smokehouse these sausages were preferably kept for late winter and spring use. In late spring they might seem over strong to pampered city tastes and stomachs; but to the hardworking farmer they were unsurpassed, especially on cold winter days. The sausage was seasoned to taste, which usually meant that liberal amounts of red pepper and sage were used. Some city folks complained that they could taste the sage a week after eating. But to the average farmer this was just one more evidence of the truth of his conviction that good strong sausage was one of the most nourishing of foods, that all this time the sausage had been "a-layin' thar an' layin' thar, jist a-nourishin' uv 'im and a-nourishin' uv 'im." There were other methods of preserving sausage, such as packing it in jars sealed over with lard and stuffing it into slender pokes made of cloth. But amongst the hardy tillers of the soil sausage stuffed in hog guts has never had a competitor worthy of the frying pan. The modern hot dog is nothing but a feeble synthetic imitation.

As a youngster I was always particularly interested in the process of sausage stuffing, which was generally done in the kitchen the day after the killing. In that process two implements were used, the sausage grinder, which was fastened to a table and turned by hand, and the sausage stuffer, likewise operated by hand. Throughout my boyhood we had at our disposal a marked improvement over the ordinary application of hand power to the stuffer, namely Aunt Milly. She was a former slave of my mother's family down in Alabama. Longitudinally Aunt Milly was exceedingly abbreviated, but equatorially her circumference was such as to suggest that the circumnavigation of her globe would be a long and tedious voyage. But what most interested me, as I watched Aunt Milly stuff sausage, was the way in which she used her abdominal muscles for the propulsion of the plunger through the tubular stuffer. Stuffing sausage was for her as easy and natural as chewing and swallowing, and no one could equal her in the quantity of sausage she could stuff in a given time. In passing I must also record that Aunt Milly required the largest size of men's brogan shoes.

Following the sausage stuffing came the render-

ing of the lard. What gave to lard rendering its glow and its glamor was its byproduct, cracklings, the precious ingredient of "shortnin' bread," so celebrated in song and story. That delightful lullaby, "Shortnin' Bread," recovered from the wastes some years ago by the radio people, is all the tribute necessary to acclaim the glories of that delectable repast. Yet I doubt whether one in ten thousand who has reveled in the song as sung, say, by Lawrence Tibbett or Nelson Eddy, ever had the experience of smacking his lips over the genuine shortnin' bread. More than "mammy's li'l baby" loved shortnin' bread. But there were also other feastings that followed hard upon hog killing. There were sweetbreads, backbones, spareribs, hogs' brains, and pigs' feet; and occasionally a hog would come to the end of his days with his tail unabbreviated. The supply of hogs' tails was never equal to the demand.

Then, there were hogs' jowls, the very mention of which started some men's mouths to watering. The hog's head, be it understood, was cut into two distinct parts, the head proper, and the jowl. After the brains were extracted from the head, the remainder, along with feet and ears, was converted into souse. The jowls, on the other hand, were hung up in the smokehouse, with white oak or hickory splits, and preferably kept till spring to be eaten with turnip greens. And here I deem it my religious duty to transmit to posterity—yours as well as mine—a record of fact, to prove that the romance of hog's jowl and turnip greens is not just a legendary tale that is told. I call it a religious duty because the person who played the stellar role was a Baptist preacher.

Word came to us that the Reverend I. B. Kimbrough, a Baptist minister of wide repute in East Tennessee, would spend a few days in our community and that as a matter of course he would stay at the home of his brother minister, my father. Brother Kimbrough had traveled much over the country, and wherever he had gone he had made one lasting impression, an impression so deep and wide and tongue-stirring that it seemed to obscure whatever he accomplished in his ministerial function. This was his inordinate love of hog's jowl and turnip greens. My mother, who in the course of her life entertained hundreds of Baptist preachers and took a pride in gratifying the palates of her guests, knowing well the reputation of Brother Kimbrough's palate, bemoaned the fact that there was not a turnip or a green in our garden.



In the late afternoon Brother Kimbrough made his appearance, probably not his first visit to our home, but the first within my memory as I was only a little past five at the time. He was a short stout man (stout in the generally accepted sense, not necessarily strong, as we then understood the word), with about all the fat that a man of his size could carry. My first impression was that his jaws were much like hogs' jowls, while his expansive frontal landscape reminded me of a three-hundred-pounder in the fattening lot (he probably weighed about 250). But he was evidently a good-humored man; he had a merry twinkle in his eyes, a friendly face, and his whole bearing was that of a man to whom life was a genuine joy. He started to eat his supper with an evident relish, and I began to wonder whether mother would tell him that she had no turnip greens. I haven't a doubt she would have done so, but he spoke up first: "Sister Burnett, can't we have some hog's jowl and turnip greens?" "I'm awfully sorry, Brother Kimbrough," my mother replied; "we have plenty of hog's jowl, but we have no turnip greens." "Well, Sister Burnett, let's send out and buy some." "I don't know," said my mother, "where any are to be had, but I'll try."

Next morning my mother had one of our hired men saddle a horse and go in search of some greens. The man was gone nearly all day, returning late in the afternoon to report that he had scoured the whole country for miles around and that all he could find was about two handfuls. The hog's jowl and turnip greens were prepared and set before Brother Kimbrough for supper. When he saw the dish before him, his whole countenance was suffused with a joy only to be likened to the joy I had seen in some countenances when they "got religion." Alas! My memory refuses to bring back Brother Kimbrough's rapturous exclamations, expressive of his ecstasy, but the picture of him as he ate that hog's jowl and turnip greens is vivid and indelible. His eyes sparkled, his countenance glowed, and every feature of his face radiated a delight that even he would have found hard to put into words. It seemed to me, as I watched him eat, that his whole body was simply oozing happiness. He ate every last smidgen of the greens, and my memory keeps assuring me that he ate most of the hog's jowl. What else there was on the table or what else he ate, I can't remember, but that there was plenty of the else I know. It would not have been my mother's table had there not been.

At length Brother Kimbrough leaned back in his chair, laid his hands gently and lovingly, close to where he felt the comforting presence of the hog's jowl and turnip greens, smiled expansively, and spoke fervently: "Sister Burnett, that's the best eating in all this world."

Thus far this narrative has for the most part been drawn by the old oaken bucketful, so to speak, from the living well of my own memories. Except for my close-up observations over a period of years at the ferry, where the streams of hogs from near and far, like the tributaries of a river, came together, thence to flow on in one mighty volume through the canyon of the French Broad River, these recollections of mine hang about the fringes of that stirring and hustling domain of hog raising and driving. For a factual account of the drive itself I turn to the rich memories of Jesse Stokely, the last survivor of that enterprising group of men who for more than a decade maintained the essential economic link between a great realm of producers and an equally great realm of consumers.

"There were," says Stokely, "as many as 25 to 40 droves from Cocke County, Jefferson County, and Greene County," to name only the nearby counties, and the drovers "were the most outstanding citizens, the men who owned the best farms in these counties." He adds that "they were a very congenial group of men and formed close friendships with one another." Concerning the five trips that he took with his father in the years 1877 to 1881, he declares: "To me it was a wonderful experience."

Stokely has furnished me with a list of the drovers whom he knew personally in three counties. Those whose stakes were in our own valley or thereabouts were Charles Stokely (father of J. W. D.), David Stokely and William R. Stokely, his nephews (the last named was the grandfather of Grace Moore, the opera singer), Joseph Huff, Leonard Huff, John Huff, Stephen A. Burnett, John Burnett, and C. T. Burnett. Of these only Charles Stokely was a professional drover over a long period of years, the others occasional drovers. As for C. T. Burnett, my brother, he was wont in after years, when reminded of his one experience as a hog drover, to cast his eyes to the far horizon and solemnly aver: "One drive enough for me!" From the northern and middle sections of the county came Bryson Walls, George Walls, his son, Duncan Easterly, Andrew Steele, Asa Bayless, Job Bible, Robert Evans, William Evans, Pleasant Driskill,



Adam Boyer, David Boyd, Joel Brooks, Sr., and Joel Brooks, Jr. William Sheffey and John Wood lived on Pigeon River above Newport. From farther down the French Broad and Pigeon rivers where the bottoms were rich and broad, still listing drovers of Cocke County, came Alexander Stuart, Alexander Smith, William R. Swaggerty, Wesley Davis, James Harrison, Andrew Moore, Adam Rorex, Burrell Rorex, James Rorex, Cas McNabb, John McNabb, and at least seven of the Susong family, including four brothers, David, Alexander, George, and Jacob H. and three of the second generation, namely, J. McCauley (son of David), Joseph and Thomas, relatives. The fifth Susong brother, William Anderson, may never have driven hogs, but he did, throughout his younger adult life, deal extensively in mules for the Savannah market. Another of the lifelong families of Cocke County drovers were the Jacks, Colonel William and his sons, Mark, Sam, and Will, owners of one of the richest portions of the Pigeon River bottoms. Passing from Cocke County into Jefferson the French Broad River continues to be bordered by wide fertile bottoms, which produced vast quantities of corn and therefore of hogs, and thence in consequence came numerous drovers. Among these were three Inmans, Shadrach, John, and Murray, several Seehorns and Cowans (among the latter, Ferd Cowan), and Taylors. One of the drovers named by Stokely, William Bible, lived in Greene County.

Compared with rail or truck transportation, the driving of hogs from producer to consumer was exceedingly slow. A drove of hogs could travel only 8 or 10 miles a day, and therefore it was essential that establishments where the drovers and their droves could be housed and fed should be available at close intervals along the route. The business of maintaining such establishments, or stands as they were called, was not only profitable but also attractive to persons with a zest for entertaining travelers. Accordingly there was never a dearth of places along the main hog-driving route where man and hog could find food and rest. Indeed at one time there were as many as fifteen or more stands along the 55 miles between Big Creek and Asheville. The situation as it existed about the middle of the nineteenth century has been described thus:

The stock stands, as the hotels between Asheville and Warm Springs were called, were generally 'well kept.' They began four miles below Asheville, at five miles

there was another, at seven and a half miles still another, at ten another, and another at thirteen and a half. After this, at 16, 18, 21, 22, 28, 33, 36, 37, 40, and 47 mileposts there were still other hotels. Many of them have entirely gone, and actually the ground upon which some of them stood has disappeared.<sup>15</sup>

In the years 1877-1881 when Stokely made his five driving expeditions, the number of stands had become considerably reduced. The first stand of importance up the river from Big Creek was Wash Allen's at Wolf Creek, 6 miles distant, although Arthur Sawyer, at Rock Creek, about midway between Big Creek and Wolf Creek, occasionally entertained man and hog. The next was Frank Lawson's, at Shutin Creek, about 3 miles farther on. Four miles short of Warm Springs was Henry Ottinger's, where the droves were ferried over the river from the south to the north side. On the north side of the river opposite Warm Springs was a stand then kept by Thomas Garrett.<sup>16</sup> At the mouth of Big Laurel Creek, 4 miles above Warm Springs, was a stand kept by Washington Farnsworth, a Negro. This stand, or another thereabouts, had previously been conducted by David Farnsworth, a substantial white citizen of the community.<sup>17</sup> The Farnsworth stand had for the drovers of Stokely's day a special interest by reason of the fact that the proprietor was a Negro. Concerning Washington Farnsworth and his stand, Jesse Stokely has said: "He had his family cabin and about four other cabins furnished for drovers. We were well fed and well lodged." At one time Zach Candler kept a stand at Sandy Bottoms, only 2 miles beyond Farnsworth's. Hezekiah Barnard was long the proprietor of a stand at Barnard, but in Stokely's time the stand was kept by a Mrs. Barnett, and the place bore the name Barnett. This was 7 miles below Marshall, the county seat of Madison County. Between Barnard and Marshall, in the late driving days, were two other stands, one 5 miles below Marshall, kept by the Widow McDowell and one within 3 miles of the town, kept by the Widow Frisby. In Marshall the

<sup>15</sup> Quoted in Arthur, *Western North Carolina*, 286.

<sup>16</sup> *Ibid.*, 285-286, places James Garrett at 1 mile below Warm Springs and names John E. Patton as the proprietor of the stand, known as the White House, opposite the Springs. This book also mentions Samuel Chunn at the mouth of Pine Creek, Samuel Smith at the mouth of Ivy, and a man named Woolsey at what is now called Putnam's.

<sup>17</sup> *Ibid.*, 196, 286.

proprietor of the hotel and hog stand, in the later years, was Major W. W. Rollins, at one time president of the Western North Carolina Railroad and otherwise prominent in the affairs of the State. Earlier, Joseph Rice kept a stand "at the lower end of what is now Marshall," while "at the upper end of that narrow village David Vance kept a tavern—a long one—probably 150 feet in length, huddled between the stage road and the mountains."<sup>18</sup> One mile beyond Marshall, at Hays' Run Creek, William Ramsey had a stand, while some 5 or 6 miles farther on was a stand kept by Caney Brown. At Alexander, half way between Marshall and Asheville, the proprietor of the famous Alexander's Hotel in Stokely's day was Captain Alfred M. Alexander, son of the builder, James Mitchell Alexander. Between Alexander and Asheville were two stands, one the establishment of General Robert B. Vance, 5 miles out of Asheville, the other kept by James Reed, a mile and a half below Asheville. In Asheville the principal resort of drovers was the Buck Hotel.

The Allen place at Wolf Creek, the terminus of the Cincinnati, Cumberland Gap, and Charleston Railroad, was much more than just a hog stand. So long as Wolf Creek was the end of our railroad, it was a favorite goal of picnickers and excursionists from all down the line, while the Allen place was esteemed as a sort of mecca. I have often wondered how the hospitality of the Allens endured through the almost endless summer inroads. A distinctive feature of the place was its extensive grounds and lovely shrubbery, including luxuriant old boxwoods. I have in the grounds of my country home at Del Rio a perpetual reminder of the Allen place. In 1875 my mother obtained clippings from the Allen boxwoods, which she planted with her own hands, and from which were grown more than a hundred fine large plants. Some fifty of those original boxwoods still thrive, and from them have been grown several hundred plants—one generation removed from the Allen boxwoods.

Best known of all the stands along the French Broad was that at Alexander, built about 1828 by James Mitchell Alexander, father of Captain A. M. Alexander who was the proprietor of the hotel in Stokely's day. "For years," according to a local history, "[James Mitchell Alexander] carried on there a hotel, store, tanyard, shoe-shop, harness-shop, farm, blacksmith-shop, waggon-factory, grist mill, saw mill, ferry, and bridge. The hotel

was famous for superior accommodations from Cincinnati to Charleston, South Carolina."<sup>19</sup> The picture of the hotel in this history shows a long two-story building, with a ballustraded verandah on each story running the full length—all typical of the tavern architecture of the time. Stokely relates that once when he and his father, with their hogs, stopped at Alexander's there were as many as 10 separate droves there for that night. "This," he remarks, "was about 4,000 hogs, with one man to a hundred hogs—40 men, with a manager for each drove of hogs—making a total of 50 men to find beds for." Moreover, he adds, "It took a lot of food to feed 50 hungry men." Probably no other tavern on the French Broad could have taken care of so many hogs and so many men at one time. The hotel, says Stokely, contained about 30 rooms. Of the drovers gathered there that night he recalls eight: Charles Stokely, his father, Thomas Susong, Bryson Walls, Alexander Stuart, Alexander Smith, James Rorex, Shadrach Inman, and Robert Evans.

Stokely's estimate of the number of hogs in the 10 droves, an average of 400 hogs to the drove, is probably a minimum. The more usual number to the drove, as he himself has told me, was about 500, sometimes as low as 300, but occasionally as high as 1,000. One drover has been quoted as asserting that he had driven as many as 2,785 hogs in a single drove from Kentucky to North Carolina.<sup>20</sup> My recollection is that the drove of Bryson Walls previously referred to was about 350 and that of my brother about the same. It seems to have been an almost invariable rule to assign one driver to each hundred hogs. Walls, as I remember, had four drivers.

Between Asheville and Hendersonville, a distance of about 22 miles, there were at least four stands. Near the present Biltmore was Joseph Reed, some 6 miles farther on (8 miles from Asheville) was Mack Case, 5 or 6 miles farther, at Fletcher, was Dr. George W. Fletcher (8 miles from Hendersonville), while near the present station called Naples was the stand kept by "Press" Patton, later by his widow and generally known as the Widow Patton place. Then came Hendersonville, where the chief resort was the McDowell Hotel,<sup>21</sup>

<sup>19</sup> Sondley, *A History of Buncombe County*, 2:746, 792.

<sup>20</sup> Arthur, *Western North Carolina*, 286.

<sup>21</sup> Mrs. P. F. Patton of Hendersonville wrote to me on May 9, 1945: "The McDowell Hotel was kept by Charles McDowell, descendant of the Revolutionary general of that name, who had, when lands in this part

<sup>18</sup> *Ibid.*, 286.

although there was another, kept by Captain John Walker Jones.

Of the Patton place Stokely has two outstanding recollections. One is that one night when he was there a baby was born. It was a boy, and the date was November 14, 1879. The other recollection is that Patton had a large apple orchard and made brandy of the apples in a "government" distillery. On a sideboard he kept a bottle of brandy called "Black Betsy," and from the bottle he gave the drivers a drink—free; he would not sell. Says my friend Stokely reminiscently, across a gap of 66 years, "He was a very fine man."<sup>22</sup>

Between Hendersonville and Greenville were some seven stands. At Flat Rock 3 miles beyond Hendersonville, was Colonel W. S. Tabor; at Green River was Philip Hart; near Saluda Gap, at the top of the Blue Ridge, John Posey kept a stand, later conducted by his widow; at Bayson Springs were William and John Hightower, who had a large government distillery; at Saluda River was John

Hodge; and 2 or 3 miles farther on was a man named Fuller; while 8 miles short of Greenville was Robert Montgomery. In Greenville the most important resort for stockmen was the Greenville Hotel.

On the road between Greenville and Anderson were John Roseman, about 10 miles out of Greenville, Colonel McCager Williams, and John Pool, the latter 2 miles out of Anderson. In Anderson the Stokelys lotted with John Catlett. Of John Roseman, Stokely remarks that "he was a fine man." One particular impression of the Colonel McCager Williams place is that the house was covered with ivy.

Respecting the stands between Asheville and Greenville, South Carolina, Mrs. P. F. Patton of Hendersonville, in a letter to me, April 7, 1945, has this to say:

In reference to keepers of stock stands in Buncombe and Henderson Counties, the Hart of Green River mentioned by Mr. Stokely was Philip Hart, of a family of early settlers. At Fletcher, Dr. George W. Fletcher, one of Henderson County's early and beloved physicians, was a descendant of one of the first white settlers. He lived and died on the old home place, where his home furnished accommodation not only for stock drovers, but for those who traveled by stage coach before the railroad was built. The village received its name from his family. The early post office, when mail was carried by stage coach, had been Shufordsville.

The Mr. Press Patton, who lived not at Skyland but at what was known for a long time as Patton's, now the railroad station of Naples, was Preston Fidelia Patton, Sr., my husband's father. One of his daughters, Mrs. Carolina P. Fishburn, still owns and resides at this old home place. It was settled and owned by an ancestor, Elijah Williamson, who moved here as soon as these lands were opened for settlers after the Revolutionary War. The soldier is buried near the highway. While the present house probably was built while stock drovers were still passing through here, the first dwelling also afforded accommodation for travelers. In early days, before the Cherokee removal, many friendly Indians visited the family there, often spending more than one night. P. F. Patton, on his paternal side, was a son of another pioneer settler, Col. John Patton, whose home on Swannanoa River,—a part of the present Vanderbilt estate at Biltmore,—and known as the Haunted House, was also a popular place with early travelers and visitors, in furnishing friendly hospitality, rather than as a commercial enterprise.

I speak here only of the road through Hendersonville and Greenville to Anderson because that was the invariable route of the Stokely drives. There

of the state were opened for settlers, obtained grants for very large boundaries, much of which lay on Mud Creek, between the old Elijah Williamson lands—afterward the home of P. F. Patton, Sr., and on one tract of which a descendant still lives—and the home place of Dr. Fletcher. McDowell, it would appear, was not proprietor of this establishment for any great length of time, as there is no mention of him in any written document that I have seen, the only record being recollections of the few who remember him."

<sup>22</sup> The date has been furnished by Mrs. Patton, who has contributed two pertinent observations, drawn from the Patton family traditions: "From all I have heard, it was an occasion of great rejoicing, and the apple brandy was offered in celebration of this wonderful event." Further, she reveals that the newcomer "was sometimes called the 'hog boy' because, at the time of his birth, the drivers of the hog droves were camped on the place." Still further, I am now permitted to reveal, by and with the advice and consent of him who played the stellar role in the performance, that the newcomer who advanced so dramatically upon the stage and was welcomed with such great acclaim, was none other than Preston Fidelia Patton, husband of my informant. Indeed almost at the moment these lines are written he is celebrating his sixty-sixth birthday, happily hale and hearty, surrounded by rejoicing friends with their bubbling reminiscences, none of which, I ween, include the drovers and drivers (not to mention their hogs) who joined in that hilarious welcome on Nov. 14, 1879. If "Black Betsey" has kept faithfully beside her godson through the pilgrimage of years, that fact has not been vouchsafed to the historian.



were other roads, particularly what was known as the Mills Gap Road, which led to Spartanburg. It was from Greenville and Spartanburg mainly that the drives spread to other towns in northern South Carolina.<sup>23</sup> Any complete story of the hog-driving business would include a survey of those multitudinous deltas of that great river of hogs that had its headwaters in eastern Tennessee and Kentucky. But that is a story waiting eagerly for some other friendly typewriter.

Characterizing the stands in general, Stokely says that, besides lodging and food for the drovers, they provided pens and corn for the hogs. With regard to the provisions for lodging the drovers he remarks reflectively: "Sometimes the sleeping quarters would be considerably crowded." No doubt the standkeepers were less concerned about crowding the drivers than they were the drovers; and it is just as likely that the drivers themselves were less averse to being crowded than were the drovers. At all events it would seem that the drivers were usually crowded, for a single drove seldom had a stand all to itself, and two average-sized droves meant ten drivers, besides two or more drovers or managers. The method of bedding the drivers was, however, simplicity itself. "The standkeeper would make down about five beds on the floor in each room, with about three men to the bed." There were times, however, when the drivers would not be put into beds but on pallets or blankets around a fire. This method has been described thus: "The drivers of these hogs were furnished large rooms, with immense log-heap fireplaces and a blanket or two each, that they furnished themselves. They would form a semi-circle upon the bare floor, their feet to the fire, and thus pass the night."<sup>24</sup> When this method was used, Charles Stokely, the drover, maintained that he had never known a man to take cold. There were, of course, days of cold drizzling rain when a driver would be soaked to the skin, his feet sloshing in his shoes. At the end of such a day nothing could be more welcome than a rousing fire—unless it was a steaming supper.

And steaming suppers were never lacking. "The menu for the meal," says Jesse Stokely, "would be plenty of milk, coffee, bread—both corn and wheat, cabbage, kraut, fresh meat—beef and pork, and potatoes." And the price per meal, or

"per diet" to use the language of the stands, was 20 cents!

It not only took a lot of food to feed the men but also a lot of corn to feed the thousands of hogs that passed over the road during a driving season. According to a local writer, "Eight bushels of corn were required to feed a hundred hogs, although another estimate reduces this to twenty-four bushels for a thousand hogs. Taking this lower estimate, about twenty-five thousand bushels of corn would be required every year to feed the hogs which passed through, if they were fed but once a day."<sup>25</sup> Stokely says that 8 bushels of corn per hundred hogs, fed once a day, was the standard feed, and he cites a record of his father of a drive to Anderson made in 17 days during which 136 bushels of corn were fed to each hundred hogs in the drove. Eight bushels of corn would normally be about 800 ears, or 8 ears to the hog.

From my own experience in hog feeding I would say that few of the hogs would eat all of their feed at once but would pause after the fifth or sixth ear for a rest. After a hard day's journey Mr. Hog would be tired and sleepy anyway. An enterprising hog might crawl out from the pile sometime in the night, nose around over the lot, and get another good fill of corn. In any case, before daybreak they would all be busy cleaning up the parts of ears and the scattered grains left over from the feast of the previous night. The hog didn't know it, though the drover did, that it was better for him not to start out on his day's journey with a full belly of undigested corn.

As to the quantity of corn required for all the hogs that passed through Buncombe County in a driving season, the estimate quoted above would seem to be entirely too low. The same writer placed the number of hogs that passed through Asheville annually at between 140,000 and 160,000. Using the middle figure of 150,000, the requirement for one feed for that number would be 12,000 bushels. As it required a week or more to go through the county, that figure must be multiplied by seven, and the result is 84,000 bushels for Buncombe County alone. This is probably less than one-third the amount consumed on the whole drive. With regard to the number of hogs that passed through Asheville in a single season, Stokely makes this contribution. In 1849 his father went as a driver for Eli McMahan of Cocke County, Tennessee, and on his return through Asheville he took

<sup>25</sup> *Ibid.*, 2:619.

<sup>23</sup> Sondley, *A History of Buncombe County*, 2:663.

<sup>24</sup> James M. Ray, cited in footnote 8. See also Sondley, *A History of Buncombe County*, 2:619.



pains to inquire at the toll office about the number that had passed the toll gate that season. The answer was 90,000 head.<sup>26</sup>

There is no question that the demand for so much corn along the hog-driving route led to its cultivation to the full capacity of the country round about and that exhaustion of the soils in those hills, hollows, and valleys followed inevitably. But it was a profitable business while it lasted. As a boy, playing along the river bank during the school recess, I saw evidence of the soil loss that was going on up the river. In my earliest school days the river was usually so clear throughout most of the autumn that we could see its bottom anywhere. In a few years it began to be muddy nearly all the time. To us youngsters it did not seem like our river; and if, in the presence of some of our elders we spoke disparagingly of it, we would get the answer: "No'th Caliner's washin' away."

As a rule the standkeepers were also storekeepers who for the most part obtained their supplies of corn by providing the farmers with goods. The price paid the farmer for corn was almost invariably 50 cents a bushel; the price charged the drovers was 75 cents. In Stokely's hog-driving days, the prices were somewhat higher. Between the proprietor of the stand and the drover there was usually no immediate payment of cash, although the drover might leave a due bill to be settled on his return. Almost always the drover had one or more lame hogs on his hands, and these were sold to the standkeeper at about the price obtainable in the South Carolina market, or even higher. The prices in Stokely's day ranged from  $7\frac{1}{2}$  to 10 cents per pound.

According to Stokely, the price for hogs in South Carolina was determined by the price of cotton. If the price of cotton was 14 cents, the price of hogs was 7 cents a pound. As the drover required a margin of 2 cents in order to make a reasonable profit, the price he could afford to pay for hogs in Tennessee was 5 cents. Here the time element

sometimes played hob with the drover's calculations. Between the buying and the selling a month or more usually elapsed, and in that time cotton might take a tumble, and when Jack (alias hog) came tumbling down, Jill (alias hog) came tumbling after. That is what happened in the instances of loss by the drovers already mentioned. The time normally required for selling out a drove was ten days, which might be considerably lengthened, if the drover found the market low or dull. One question that is bound to arise in the mind of one who has never gone wayfaring with hogs is whether the drover also had to figure on a loss of weight. To this question Stokely replies: "Between Big Creek and Asheville a hog would lose on the average 12 pounds. Between Asheville and South Carolina he would generally hold his weight. A few would actually gain in weight."

The return journey was made on horseback in three or four days; on foot it required a day or two longer, although an occasional driver could hoof it about as quickly as a horse. Recently this writer was told the story of a driver who accompanied his drover part of the way and then cut across fields and woods, saving several miles. Late that afternoon, when the drover rode up to the tavern where he planned to spend the night, he was surprised to find that his driver had preceded him, having walked 60 miles that day.

In conclusion it may not be amiss to remind you that the cessation of hog driving by no means meant the cessation of hog raising along the wide stretches of river bottoms that made the lower French Broad one of the finest bodies of farming land in the whole of Tennessee. Hogs and cattle continued to be the most important crops along the river, although in recent years crops for the canneries have grown to large proportions. Then came the Douglas Dam, and thousands of acres were submerged. The hog raisers have retreated to the hills, to let the memories of the onetime busy life down there at the bottom of the lake, with its vast herds of hogs and cattle, haunt them by day and gnaw upon their livers by night.

<sup>26</sup> See footnote 4.

## PRELUDE TO THE ANTIRENT WAR OF 1845 IN DELAWARE COUNTY, NEW YORK

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A clearer understanding of the basis of the grievances of the "Down-Renters" in New York calls for some knowledge of the terms of the leases under which individual farmers occupied their farms. With this thought in mind the writer made a careful study of Chancellor Robert R. Livingston's Great Patent Account Book covering the years 1792-1805 for light upon the particular grievances of the Chancellor's "perpetual" tenants.<sup>1</sup> However, it must be borne in mind that tenants of other landlords had similar grievances.

Judge Robert R. Livingston, the Chancellor's father, had barely come into his own father's Hardenbergh Patent lands when he died intestate on December 9, 1775. Although the Chancellor was heir to the Hardenbergh holdings by virtue of the existing law of primogeniture, he granted his three brothers and six sisters such shares of the estate as he believed his father would have desired them to receive if he had executed a will.<sup>2</sup> As a result, each of his sisters got 20,000 acres while his three brothers received 30,000 acres apiece.<sup>3</sup> The

leaseholds thus accounted for in his Great Patent Account Book represent part of the residue of the Chancellor's original inheritance.

The Great Patent Account Book has data on 101 primary leaseholds, that is leases given to original settlers for a term described as "forever." It also covers the subsequent disposition of many of these same farms after they passed out of the possession of the original tenants. Many of the leased farms were located in Middletown Township, Delaware County, while one farm was in Delhi Township in the same county. A substantial number of leaseholds were at Schoharie Kill while still others were variously described as being on the Delaware River, "the little Delaware," and "between the branches of the Delaware," or merely in Great Lot 4.<sup>4</sup>

In reporting on the composition of the population of Middletown Township, an early nineteenth-century commentator stated that "The present inhabitants are composed of immigrants from the Eastern States and of Irish, Scotch and some Dutch and German families."<sup>5</sup> Although it is virtually impossible to distinguish all of the Easterners from the Scotch and the Irish, very few names on Livingston's tenant roll indelibly stamp the holder as either of Dutch or German origin.

Although Chancellor Livingston was granting perpetual leases as early as May 1790, only three tenants were then tempted to settle upon his land.<sup>6</sup> It was not until February 1792 that the tide of settlement set in, and by the spring of 1796 he had succeeded in disposing of more than half of his primary leaseholds, 64 in all. Even at that,

<sup>1</sup> The patent "was described in the grant as extending to the main branch of the Delaware River. This the grantees claimed to be the West Branch, while the tenants claimed that the grant should properly stop at the East Branch." David Murray, "The Antirent Episode in the State of New York," American Historical Association, *Annual Report*, 1896, 1:145-146.

<sup>2</sup> Horatio G. Spafford, *Gazetteer of the State of New York*, 238 (Albany, 1813).

<sup>3</sup> Great Patent Account Book, 100, 101, 107.

<sup>1</sup> The Robert R. Livingston Great Patent (Middletown, N. Y.) Account Book, 1792-1805, is in the New York Historical Society. The Great, or Hardenbergh, Patent, comprising the major portion of Delaware County as well as goodly portions of Ulster, Sullivan, and Greene counties, New York, was originally patented to Johannes Hardenbergh and his associates on April 23, 1708 by the notorious Governor Cornbury.

<sup>2</sup> Robert Livingston, Judge Livingston's father, died on June 27, 1775. Inasmuch as Judge Livingston acquired this land after the execution of his last will and codicil it did not pass thereunder.

<sup>3</sup> Edwin B. Livingston, *The Livingstons of Livingston Manor*, 482 (New York, 1910). Deed, Robert R. Livingston to Margaret Tillotson, 1779, in Department of State, Division of the Land Office (Albany), Book of Deeds, 35:88. Mrs. Tillotson received 19,948 acres. Deed, Robert R. Livingston to John R. Livingston, Apr. 7, 1789, Ulster County Clerk's Office (Kingston), Libers of Conveyances, KK, 383. Livingston received 32,000 acres. Deed, Robert R. Livingston to Catherine Livingston, Oct. 8, 1779. *Ibid.*, Conveyances, 18:354; 20,000 acres.

he was none too successful for as late as June 1801 he was still accepting new tenants.<sup>7</sup> The farms taken under lease were not large, ranging from 43 acres to a maximum of 218 acres. One-third of all lessees preferred an average of 160 acres.

Primary lessees entering upon their newly acquired farms found the soil in its wild virgin state. To have exacted rentals for land which could not be cultivated immediately would have been manifestly unfair as the value of the land itself was constantly being enhanced by improvements. To overcome this valid objection primary leases provided a rent-free period during which new tenants were obliged to clear their land and at the end of which the rent was fixed at a stated number of bushels of wheat per given number of acres leased.<sup>8</sup> In many instances other charges and payments also accrued to Livingston.

Although all of Livingston's leaseholds were perpetual, there was lack of uniformity in the duration of the rent-free period.<sup>9</sup> The three pioneer settlers were allowed six years before they were to pay their initial rental. On the other hand some settlers who entered upon their farms during the years of the high tide of settlement (1792-93) had to be satisfied with four-year periods.<sup>10</sup> Other leases executed on the very same day (February 1, 1792) that the four-year rent-free leases were granted provided for an additional year whereas leases taken the following May made provision for the maximum six-year period, the most common rent-free period granted by Livingston at the time.<sup>11</sup>

It is not possible to explain satisfactorily the different rent-free periods in terms of soil fertility or superior location of the leased farms solely on the basis of the data contained in the Account

Book, but it would seem as if the long-term rent-free period was no more advantageous than the short-term. What was originally intended as a short-term period of four years in practice turned out in some instances to be the maximum period, because the tenant was either unable or unwilling to pay his rent when due. Two recipients of four-year rent-free leases actually owed six years' rent before they vacated their farms, whether voluntarily or involuntarily does not appear.<sup>12</sup> Similarly, the holder of a six-year rent-free lease was four years' rent in arrears ten years after he first entered upon his acres.<sup>13</sup>

The inability of the Delaware County tenants to meet their obligations promptly may have been due in no small part to the characteristics of the soil. This may explain Livingston's sudden change in policy in 1795 and his decision to grant leases with a five-year rent-free period, a five-year half-rent period, and finally full rent for the remainder of the term.<sup>14</sup>

All leases called for the payment of rent in terms of bushels of wheat—"good wheat," "winter wheat," "good winter wheat," or "good merchantable winter wheat,"—to be "delivered on Hudson's River at Catskill or Sawyer's Kill."<sup>15</sup> A lease executed in February 1791 called for 24 bushels of wheat (15 bushels per 100 acres) as the rental for the average-size 160-acre farm.<sup>16</sup> A year later, the rent was still the same for the same number of acres, but in the spring of 1792 new tenants were required to pay 25 bushels and three years later the rent had been raised to an average of 28½ bushels.<sup>17</sup> Some tenants were willing to pay 29½ bushels or even as much as 32 bushels for 160-acre farms.<sup>18</sup>

<sup>12</sup> Leases executed Feb. 1, 1792, first rent due Feb. 1, 1796. The tenants seem to have met their first payment but failed to pay any rent for 1797-1802. *Ibid.*

<sup>13</sup> *Ibid.*, 22. Lease executed May 1, 1792, first rent due May 1, 1798. Tenant seems to have paid his first rent but defaulted for 1799-1802.

<sup>14</sup> *Ibid.*, 51, 69.

<sup>15</sup> *Ibid.*, 4, 7, 24, 25, 82.

<sup>16</sup> *Ibid.*, 11.

<sup>17</sup> *Ibid.*, 13. Joseph Howard undertook to pay 25 bushels, May 1, 1792. *Ibid.*, 22, 45, 58, 60.

<sup>18</sup> *Ibid.*, 42, 65. The average price of a bushel of wheat at Albany on Jan. 1 of each year from 1793 through 1805 ranged from 6 shillings New York currency to 16 shillings, a shilling being worth 12½ cents. New York State Assembly, 69 Session, 1846, *Document 156*, p. 51.

<sup>7</sup> *Ibid.*, 128.

<sup>8</sup> According to Jay Gould, *History of Delaware County*, 256 (Roxbury, N. Y., 1856), who was in a position to discuss the matter with some original settlers "even those who could have purchased and paid in full for their land preferred the other alternative."

<sup>9</sup> Christopher Darrow received a lease based upon the continued existence of three lives while Robert Scott received 10 acres rent free for life. These are the only two leases which were not perpetual as to term. Great Patent Account Book, 38, 135.

<sup>10</sup> *Ibid.*, 3, 4, 7, 13, 16, 28.

<sup>11</sup> All these lessees received 5-year rent-free periods. *Ibid.*, 47, 54, 71. For 6-year rent-free periods, see *ibid.*, 22, 35, 37, 53, 56.

The vast majority of Livingston's tenants met their obligations by merely undertaking to deliver the requisite number of bushels of wheat. Nevertheless some tenants were under an additional and heavier obligation, namely paying one-tenth of whatever sum they might receive for the sale of their leaseholds to third parties. According to the Account Book, not less than 25 Great Patent tenants, 23 primary and 2 secondary lessees, assumed this burden. Strange as it may sound, the 2 secondary tenants apparently assumed a burden not previously borne by the original occupants of their farms.<sup>19</sup> From the standpoint of location, 11 of the 25 tenants dwelt at Schoharie Kill, 3 each at "Little Delaware" or "Delaware," and 1 between the branches of the river of that name.

The comparative absence of a tenth-sale provision from leases for farms located in either Great Lot 4 or Middletown is most notable. On the other hand, onerous as the tenth-sale may seem, it was a far cry from the still more onerous quarter-sale exacted in similar leases elsewhere in New York. Again on the basis of the Account Book, it was the Schoharie Kill and "Delaware" tenants rather than those located elsewhere who agreed to supply Livingston with four fat fowl and render a day's riding. Only four of his tenants seem to have assumed this additional burden, while a fifth was under obligation not only to pay his quota of wheat and furnish a day's riding but also to yield his tenth-sale in the event that he disposed of his leasehold.<sup>20</sup>

The most remarkable feature about Livingston's Hardenbergh leases lay not in the terms of the leases nor in the obligations assumed by his tenants but in their marked inability to meet their obligations promptly, if at all. This inability, evident from the outset, is marked not only by the great number of farms abandoned, voluntarily or involuntarily, but also by the large number of farms

transferred to third parties, an excellent expedient for getting out from under. Equally revealing is the large number of instances in which Livingston was obliged to forgive one or more years' rent or to accept a rent in a kind other than the quota of wheat originally stipulated. On 16 different occasions Livingston forgave rents in arrears for periods up to a year and a half. Ten of these instances were in Schoharie Kill and 6 in Great Lot 4. The tenants of adjacent lots 13, 14, and 15 in the Great Lot were forgiven past-due rent as were the tenants on adjoining lots 4, 5 and 6, 14 and 15, and nearby lot 12 at Schoharie Kill.<sup>21</sup> In view of their location, the question of whether these farms were marginal arises. However, primary no less than secondary lessees were forgiven arrears, including some not confined to the initial rents due.

There is also the question of how tenants satisfied their obligations if they were in no position to tender the requisite quantity of grain. Yokes of oxen were substituted on four occasions, a single ox on three, and cows on two.<sup>22</sup> Two tenants offered 452 pounds of maple sugar valued at a shilling a pound in settlement of their accounts and received credit therefore.<sup>23</sup> Tenants desiring to retain their acres and lacking both the grain or something in kind acceptable to Livingston might give their note for the amount due or, failing that, surrender part of their improved land to satisfy the balance due on the remainder.<sup>24</sup>

At one time or another 30 of the leaseholds were vacated. In some instances the vacating tenant did not even bother to clear more than 2 or 3 of his leased acres.<sup>25</sup> Although vacating leased farms continued into the new century, it was not the prerogative of primary lessees, for secondary lessees are on record as having vacated their farms.<sup>26</sup> It would seem, however, that some of these farms were vacated much against the tenants' wishes and solely as a result of their landlord's re-entry upon a default.<sup>27</sup> The most interesting

<sup>19</sup> Great Patent Account Book, 45, 51.

<sup>20</sup> *Ibid.*, 25, 29, 129, 144-145. John Maben and Richard Peck may have assumed the burden of rendering a day's riding and delivering four fowl, but if they did so they were soon relieved from this obligation. The respective entries under their names were crossed out after entry. *Ibid.*, 26-27. Four fowl were worth 4 shillings from Jan. 1, 1793 through Jan. 1, 1805 while a day's riding was worth 10 shillings to Jan. 1, 1799 and 14 shillings thereafter. New York State Assembly, 69 Session, 1846, *Document 156*, p. 51-53.

<sup>21</sup> Great Patent Account Book, 14, 35, 38, 100, 103-104, 107.

<sup>22</sup> *Ibid.*, 11, 14, 27, 121; 8, 9, 31; and 20, 109.

<sup>23</sup> *Ibid.*, 103, 104.

<sup>24</sup> *Ibid.*, 25, 37, 60, 64, 74; and 9, 37.

<sup>25</sup> *Ibid.*, 17.

<sup>26</sup> *Ibid.*, 34, 56, 57, 59.

<sup>27</sup> The southern part of Lot 12, Schoharie Kill, is the only lot definitely known to have been reentered. *Ibid.*, 30.



fact about the various vacated farms is that all were located in Great Lot 4 and none at Schoharie Kill, "Delaware," or any of the other localities heretofore named.

Exceeding the number of farms vacated was the number of farms transferred from one tenant to another. The majority of the thirty-six farms sold during 1792-1805 involved but a single change of ownership, but a decided minority changed hands two or three and one even four times.<sup>28</sup> Some tenants preferred to get rid of their properties once and for all whereas others were content to sell part and retain the balance for themselves. Naturally, when tenants subject to the tenth-sale disposed of their leased farms 10 percent of the purchase money accrued to their landlord. Thus, when one tenant succeeded in selling his 240-acre Schoharie Kill farm for £366 12s., £36 12s. immediately accrued to Livingston who received payment in the form of the buyer's note.<sup>29</sup> Anxious as Livingston was to rent his farms he actually sold a 201½-acre farm in the

fall of 1790 for £100. He accepted a yoke of cattle as the down payment of £19 and a six-year bond and mortgage upon the property for the balance.<sup>30</sup>

In preparing the *Gazetteer of the State of New York*, the compiler had recourse to the usual method of sending questionnaires broadcast to local worthies. On the basis of such information from his Delhi correspondents, he concluded: "The inhabitants are principally farmers, more attentive to the cultivation of the soil than the getting of lumber, a trade that enriches nobody but the merchant, and actually impoverishes alike the land, with its occupant, whether he rent or own it."<sup>31</sup> Unfortunately this sage observer seems to have hit the nail of the head insofar as Livingston's Great Patent tenants were concerned. Had they really prospered it is doubtful whether they would have permitted their arrears to accumulate unless they did so deliberately with an eye to the future. Prosperous farmers would not have been so prone to vacate their farmsteads. Similarly it is doubtful whether there would have been so rapid a turnover among the tenantry had they really been satisfied with their lot.

<sup>28</sup> Lot 7, Schoharie Kill, changed hands four times between 1795 and 1803. *Ibid.*, 111.

<sup>29</sup> The purchaser, Matthew Bove, subsequently kept 100 acres and sold two tracts of 50 and 90 acres respectively. *Ibid.*, 107.

<sup>30</sup> *Ibid.*, 6. Lot 6, Margaret, Middletown.

<sup>31</sup> Spafford, *Gazetteer of the State of New York*, 176.

## RURAL INDIANA IN TRANSITION, 1850-1860

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The idea has been advanced that the decade of the 1850s was a golden age in the history of Indiana—an era in which life for the majority of Hoosiers, especially in the economic sphere, was better than before or since. The basis of this belief may be stated thus: during the decade, the pioneer effort flowered into an equitable life which lacked the crudities and hardships of the frontier and also contamination from the evils of industrial civilization.

There is, indeed, much evidence to support this view. Taken as a whole, Indiana had emerged from frontier conditions. It is true that communities were still being opened up and settled in the prairie counties of the northern part of the State and on the recently drained swamp lands of the same section and that many vestiges of the earlier way of life remained in the older parts.

Generally speaking, however, rural Indiana of the 1850s was no longer part of the American frontier but a product of it. Although half of the rural population still dwelt in log cabins, few new ones were being built, and the other half already had brick or frame houses.<sup>1</sup> Half of the farm land was under cultivation, and half of the men were farmers who owned their holdings; the rest carried on all the other occupations, urban and rural, skilled, unskilled, and professional.<sup>2</sup>

Although plausible at first glance, it is dangerous to consider the 1850s as a golden age in the sense that the people themselves felt that they had

<sup>1</sup> Logan Esarey, *A History of Indiana*, 2:583 (ed. 2, Indianapolis, 1918).

<sup>2</sup> U. S. Census Office, 8th Census, 1860, *Agriculture*, 42; 7th Census, 1850, p. 789-790.

achieved the *sumum bonum* of existence. There was a great deal of self-complacency, but this feeling was more evident in political than economic life. The latter was far from static, and there were frequent expressions of desire for change or progress. It is with a view to delineating the actualities of the social and economic life of rural Indiana during the 1850s that this historical reconstruction is undertaken. In addition, it is expected that the details of this survey will provide the bases for accurate generalizations concerning the agricultural history of more extensive regions of the country in a corresponding stage of development.

Farming in Indiana during the decade under review was a moderately profitable occupation. There was a ready market for the surplus of wheat and hogs, and the newly built railroads furnished transportation at rates made reasonable by virtue of canal and river competition. Although farmers were interested in keeping their soil fertile, they were not yet compelled to do so, and there was still another fourth of the total farm land that could be brought under cultivation as needed.<sup>3</sup> The average farm contained about 130 acres, and more than one-third of the counties had no farms larger than 500 acres.<sup>4</sup> The typical farmer had a wife and four children whom he supported by the cultivation of 65 acres, and although he farmed for a surplus, his farm was still very much a self-sufficing unit. As a contemporary English traveler observed: "A backwood farm produces everything wanted for the table, except coffee and rice, salt and spices."<sup>5</sup> When dry goods, shoes, and farm implements are added, the list of things the farmer ordinarily bought is complete. The farmers already had binders and threshing machines. Although the spinning wheel and loom were still in common use, many wives made clothes for the family from purchased goods. Sewing machines and coal-oil lamps were also coming into more widespread use. Tenant farming and mortgages were still uncommon.

The towns of the State were doubling in size every decade, but there were no large cities. The typical manufacturing establishment had a capital investment of \$3,500 and employed four men. Considering capital and labor, it was, therefore,

the equivalent of two average farms of the time. The economic status of an industrial laborer was probably as good as that of a farmer, except for the ownership of land. Most laborers supplemented their earnings by cultivating a few acres. The number of industrial workers about equaled the number of farm laborers but was only one-eighth the number of independent farmers.<sup>6</sup> The principal industries were flour milling, sawmilling, pork packing, and the making of shoes, furniture, liquor, and machinery. The return on the capital investment varied but averaged about 50 percent in these leading industries. There was, however, almost no concentration in any industry, so the profits were widely distributed and there were no large fortunes. Landownership rather than industrial profits was the chief source of wealth, and the largest amount of taxable property owned by any one individual was valued at about \$250,000. In short, practically all individual effort was being rewarded with moderate success through the exploitation of abundant opportunities and expanding markets. One might almost be tempted to conclude that the Jeffersonian ideal of a predominantly agrarian democracy was realized by the Hoosiers during the pre-Civil War decade.

A general spirit of optimism pervaded all communities and groups. Every town expected to be a metropolis; every banker hoped to be a captain of finance; and every debtor looked forward to the day when he would be free from financial stringency. One individual, when sending money to pay claims against himself, wrote: "By the constant exercise of the graces of humility and perseverance and the blessings of Providence I hope to get along. My income may now with safety be put at \$400 a year. This may with industry be indefinitely increased."<sup>7</sup> Even a serious economic crisis could not dampen the optimism of the Hoosiers during the decade. Recuperation was regarded as certain, and as one editor insisted: "We are headed not for another crash . . . but for the hey-day of prosperity and money making."<sup>8</sup> Confidence in the future rather than satisfaction with the present was the keynote insofar as material well-being was concerned.

<sup>6</sup>U. S. Census Office, 8th Census, 1860, *Manufactures*, 142-143.

<sup>7</sup>Letter of John A. Reed to Daniel D. Pratt, Dec. 15, 1850. The unpublished materials used in this article are mainly in the Indiana State Library.

<sup>8</sup>Elkhart Review, May 7, 1859.

<sup>3</sup>*Ibid.*

<sup>4</sup>U. S. Census Office, 8th Census, 1860, *Agriculture*, 198.

<sup>5</sup>William Ferguson, *America by River and Rail*, 347 (London, 1856).

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Originally Indiana had for the most part been heavily wooded. This was true, without exception, for the region between the Ohio and the Wabash rivers, but the land north of the Wabash was covered with moraines and morainal lakes and small prairies or forest openings. In the real prairie region lying between the Wabash, the Tippecanoe, and the Kankakee rivers and the Illinois line, there were only infrequent and inconsiderable hardwood groves. About two-thirds of the trees of the State were oak and beech. Next in order came maple, hickory, ash, walnut, poplar, elm, sycamore, and cherry. In the southern and central parts, the smaller trees like dogwood, pawpaw, thorn, persimmon, plum, and crab apple were plentiful.<sup>9</sup>

Southern Indiana, having been settled some twenty to thirty years longer than any other section of the State, was in many ways the best developed economically, but its position was already being challenged by the central section. Both were heavily wooded, but the soils of the southern part were of varying degrees of desirability, whereas those of the central part were of more uniform richness, although they probably had poorer natural drainage. By 1860, the ratio of improved to unimproved farm land in the central part was 3,118,000 acres to 2,610,000 acres as compared with 3,787,000 acres to 4,023,000 for the southern part.

The northern part, which contained most of the swamp lands and was settled mainly from 1840 to 1860, made the poorest showing with 1,211,000 acres of improved and 1,401,000 acres of unimproved farm land. Taking the State as a whole, there were about 8,000,000 of improved and an equal amount of unimproved acres. There were about 5,500,000 acres, mainly composed of swamp lands in the north and barren hills in the south, that were not in farms.<sup>10</sup> In 1850, the Federal Government had turned over 1,286,827 acres of swamp lands to the State which were then drained and sold so far as possible in the early years of the decade.<sup>11</sup> In 1853 there were only 246,339 acres in the entire State that were unsold and unappropriated.<sup>12</sup>

<sup>9</sup>J. H. Colton, *Colton's General Atlas*, article 41 (New York, 1860). See also J. Richard Beste, *The Wabash, or, Adventures of an English Gentleman's Family in the Interior of America*, 1:252 (London, 1855).

<sup>10</sup>Computed from statistics given by counties in the U. S. Census Office, 8th Census, 1860, *Agriculture*, 38-45.

<sup>11</sup>M. W. Cluskey, *Political Text Book, or Encyclopedia*, 634 (Washington, D. C., 1857). Counties with a

Probably the best farms were in the Whitewater Valley and southeastern Indiana generally, which in many ways reached its maximum development in this period. However, in all southern and central Indiana, farming was making rapid strides, and on the better farms, log cabins were being replaced by frame houses and larger barns were being built.

The northern, and more especially the northwestern, part was not so far advanced. Horace Greeley, after a ride by handcar from La Fayette to Westfield, wrote: "I doubt that all the houses visible on that seventy-eight miles would amount to one hundred, and I am sure they would be dear at two hundred dollars each on the average. Yet there is much fine timber and excellent land on that route, and he who passes ten years hence will see a different state of things."<sup>13</sup> Greeley also expressed the following opinion of the more fertile and more settled regions of northern Indiana.

The most eligible wild lands are those combining timber and prairie in about equal proportions so interspersed that the one is rarely more than a mile or so from the other. Northern Indiana, embracing La Porte, St. Joseph, Elkhart, and one or two other counties, is admirably favored in this respect. Here the population is already quite compact and the land has a fair value apart from the influence of speculations. I think farms in the counties above named would now average twenty dollars per acre above the value of the buildings and the fences, which are often worth as much more. There are farms adjacent to villages which would command \$100 per acre, or even more; but these are few.<sup>14</sup>

Another observer pointed out the difference between the development of wooded and prairie lands. "La Porte county is a prairie county and

large amount of swamp land were: La Porte, 83,732 acres; Porter, 55,305; St. Joseph, 49,669; Marshall, 45,280; Knox, 28,710; Fulton, 25,700; and Allen, 13,809. These data are from the *Madison Courier*, Jan. 29, 1851. Starke and Jasper counties should be indicated. The surveyor in Jasper County estimated that there were between 80,000 and 100,000 acres there. At that time Jasper included Newton County. Letter of Wesley Spitler to D. D. Pratt, In Camp, Jasper Co., Ind., Jan. 3, 1851.

<sup>12</sup>U. S. General Land Office, *Commissioner's Report*, 1853, p. 45.

<sup>13</sup>Quoted in Frank F. Hargrave, *A Pioneer Indiana Railroad*, 124 (Indianapolis, 1932).

<sup>14</sup>St. Joseph County *Forum*, Nov. 5, 1853, reprinted from Greeley's *New York Tribune*, Oct. 28, 1853.



came to an acme all at once; and not advancing any they continue all the old habits. The timbered counties are fast developing themselves, and perceptibly improve in morals as well as agriculture and science."<sup>15</sup>

The grand prairie was the last area to be settled. Prior to 1850, it had few settlers, but during the decade, large parts of it were brought under cultivation. A young lawyer, soon to be elected to Congress, described it thus: "Here [Monticello] begins grand prairie, and extends to the Mississippi. From the court house steeple one can see around one hundred fifty miles of prairie; now a waving sea of flowers."<sup>16</sup> Speculators like Henry L. Ellsworth, believing in the utility of the prairie, had bought large tracts which they endeavored to sell to settlers. In the 1850s their judgment was vindicated, and they began to realize returns on their investments.

The only real wilderness left was Kankakee Valley, then a paradise for hunters and trappers. It was said to shelter the greatest variety of game birds anywhere in the United States; but even here, in the later years of the decade, drainage and settlement were taking place. The drainage of Beaver Lake, covering about 10,000 acres in Newton County, was begun. It was charged that the Swamp Land Law was a swindle because the lands were first sold and then drained at State expense. According to one editor, "Speculators who procured the passage of the law will buy the land at its present value, and will have it drained with the money they pay for it."<sup>17</sup> There was probably some truth in the charge. At least the Beaver Lake land was owned by Michael G. Bright of Madison, a financier and brother of United States Senator Jesse D. Bright.<sup>18</sup> It is difficult to assess the effect of speculation on the settlement of the State. Sometimes it seems to have aided, and in other instances it was detrimental.<sup>19</sup>

<sup>15</sup>Letter of J. B. C. in Fort Wayne *Sentinel*, Mar. 25, 1854. The observation regarding land is correct, but it is doubtful whether morals were improving. Judging by the context of the letter the author had in mind drinking only, and Fort Wayne, in a timbered country was probably "wetter" than La Porte, in a prairie region.

<sup>16</sup>John Upfold Pettit to his father, Monticello, Mar. 18, 1853.

<sup>17</sup>Thomas Bringham in Logansport *Journal*, May 14, 1853.

<sup>18</sup>John Ade, *Newton County*, 41-45 (Indianapolis, 1911).

<sup>19</sup>S. W. Widney, "Pioneer Sketches of DeKalb

Land values doubled in Indiana during the 1850s. In comparison with the other States of the Old Northwest its record in this respect was at least average. The rise was less than in Illinois, equal to that in Michigan, and greater than in Ohio and Wisconsin. In 1850 the average value of Indiana farm lands was \$10.66 per acre; in 1860 it was \$21.16. These values differed somewhat in the various sections; in the north and south, the average was approximately \$20 while in the central part, where there were 5,000,000 acres more improved and unimproved land, the average was \$24.<sup>20</sup>

Lands appraised for tax purposes were given a low value. In Marion County, a farm, exclusive of improvements, was appraised at from \$10 to \$15 an acre.<sup>21</sup> Yet it was near Indianapolis and was probably worth more. A correspondent of an Indianapolis newspaper pointed to unequal assessments, varying from \$2.96 in Whitley County to \$18.25 in Union County, and called for greater uniformity.<sup>22</sup> There was, of course, considerable difference in the fertility of land and the conditions of improvement from one county to another, but there were apparently some rather glaring inequalities that needed correction.

The prices asked for farm lands varied widely. In Switzerland County a farm of 180 acres, with a good house and 65 acres cleared, was offered for \$7,000. In Carroll County, 240 acres of woodland was priced at \$1,000, but near Madison a 240-acre tract of unimproved land was being held for \$110 an acre.<sup>23</sup> In Putnam County only \$350 was asked for 80 acres. A farm consisting of 125 acres of Terre Coupee prairie in St. Joseph County sold for \$50 an acre,<sup>24</sup> and a 92-acre farm near Medora brought \$2,200.<sup>25</sup> There were, however, lands in the State that could be bought for \$5 an acre.<sup>26</sup>

On the same subject, a farmer in the Whitewater Valley wrote: "In a pecuniary point of view, I have done much better than I could have done in

County (Reprint of Pamphlet of 1859)," *Indiana Magazine of History*, 25:104-156 (1929).

<sup>20</sup>Computed from the statistics in the Federal census reports for 1850 and 1860.

<sup>21</sup>Appraisalment by Jesse Price of real estate owned by Joseph Beeler in Marion County, Mar. 22, 1851.

<sup>22</sup>*Indiana State Journal*, Dec. 22, 1851.

<sup>23</sup>Beste, *The Wabash*, 1:281-282.

<sup>24</sup>St. Joseph County *Forum*, Apr. 19, 1856.

<sup>25</sup>John B. Durham to Samuel W. Durham, July 25, 1859.

<sup>26</sup>J. Landis to James Embree, Petersburg, May 1, 1856.



that country [Rockbridge County, Virginia]. I now own 393 acres of land which I could sell at 50 dollars per acre."<sup>27</sup> Though the price is not stated, the following advertisement of a northern Indiana farm is interesting: "Farm for sale: Six miles east of Fort Wayne, near canal, 100 acres, 80 acres improved. Frame House, 36 x 47, cellar, two wells, springs, frame barn, 36 x 45, underground stables. Orchard, 500 to 700 bu. of apples, peaches, plums, and grapes."<sup>28</sup> Apparently most newcomers could not afford to purchase farms as well developed as this one, for the advertisement ran for several months. The Indiana Land Agency at Fort Wayne advertised unimproved lands in 26 counties of the northern part of the State and improved farms in Allen, Huntington, Wabash, and Noble counties.<sup>29</sup> The \$20 per acre which was asked for a Dearborn County farm with a log cabin, 30 acres being cleared and the remaining 40 fine untouched woodland was said to be a low price.<sup>30</sup> As late as 1858, wet lands in Gibson County could be bought for \$2 to \$2.50 per acre.<sup>31</sup> The State was also advertising and selling town lots and farms in 55 counties which had been forfeited for non-payment of interest on loans from the sinking fund.<sup>32</sup>

It is difficult to give an adequate economic portrayal of an average rural community in Indiana in the 1850s. An approximate view may be gained by a detailed study of a township in one of the counties of the east-central section of the State.<sup>33</sup> It had one small village of the type to be found in almost any township of the State. Otherwise it was completely rural. There were 988 people, comprising 183 families. Of the heads of families, 136 were farmers, 17 were laborers, probably on farms in most cases, and 5 were widows. This listing leaves 25 families for the village, or a total population of 104. In the village were 3 merchants, 1 grocer, 1 innkeeper, and 1 clerk, to represent the retail trade; 2 tailors, 1 shoemaker, 2 wagonmakers, 1 blacksmith, 2 tanners, 2 coopers, 2 cabinet-makers, and 1 miller, who, taken together, represented manufacturing; 1 joiner and 3 carpenters

who comprised the building trade; and 2 medical doctors—the sole representatives of the professions. The fact that the enumeration included no preacher or teacher may mean that there was no church or school in the community, but more probably it indicates that these institutions existed but were served by itinerants.

The wealthiest farmer in the township had real estate worth \$6,000, while the wealthiest man in the village was a merchant with \$4,700 worth of real estate. Forty-four families had no real estate whatever, and 64 owned less than \$1,000 worth each. A percentage distribution of landownership would show that 24 percent of the heads of families owned no real estate in the township; 35 percent owned 16 percent of the wealth in real estate; 34 percent owned 56 percent and 7 percent owned 28 percent.

The farm families were larger than those of the village, the average being 4.3 as compared with 2.6. Of the 183 families in the township, 18 were childless, and the largest family had 11 children. The 115 families with 4 or less children had an average wealth of \$740, whereas the 68 families with 5 or more children averaged \$1,323. From these figures, the deduction might be made that children were an asset rather than a liability in an economy based on land. When the comparison is made in terms of individuals the disparity is not so great, for the 494 people belonging to the small-family group possessed a total wealth of \$85,090 and 492 people of the large-family group had a total wealth of \$87,985. Still, considering the fact that the children constituted a larger portion and cost less to support the balance was in favor of the large families.

Glimpses of the diverse human factors impinging upon the economic scene add further interesting details. A certain William Gray had bought land in central Indiana but for some reason did not occupy it, lingering on in Ohio. His friend, James Mix, having moved to Indiana, began a campaign by letter in the late 1840s to persuade him to move to his farm. "You could not expect to make a dollar per day—still there is plenty of work if you wish to labour out."<sup>34</sup> The implication is clear that Mix looked down on hired labor and wished to point his friend's ambitions somewhat higher. A half year later he wrote:

I was afraid you would fool your land away—I had about gave you out—if you move out here in time I

<sup>34</sup>James S. Mix to William Gray, Dec. 24, 1848.

<sup>27</sup>James M. Allen to J. D. Davidson, Beechymire, Union County, Jan. 20, 1856.

<sup>28</sup>Fort Wayne *Sentinel*, May 18, 1850.

<sup>29</sup>*Ibid.*, June 29, 1850.

<sup>30</sup>Aurora *Standard and Press*, Aug. 6, 1856.

<sup>31</sup>Elisha Embree to James T. Embree, Dec. 14, 1858.

<sup>32</sup>Indianapolis *Indiana State Journal*, Oct. 22, 1849.

<sup>33</sup>The data for this study are from the manuscript records of the Federal census of 1850 for Liberty Township, Delaware County, Indiana.

have about Nine akers of ground to sow in Wheat on good terms. . . and corn ground for a small Family a while by some little Fixing at least till you could get up a Cabin—You may expect to put up with some hardships for a while but perhaps nothing more than you experience there and then a home of your own will urge you forward to exertions—property is rising in value.<sup>35</sup>

Thus Mix argued and in so doing exhibited several qualities typical of his kind and time. He was not afraid of hard work, nor of privations, and he was willing to share what he had in order to help a friend. In the same letter, he added that the wheat crop was a failure and that his family would have to live on corn bread for a year. Thus, it may be said that he also had courage and optimism.

Another good description of farming conditions is supplied by a letter from a resident of Brewens Cross Roads in Parke County, Indiana, to friends back in Virginia.

I am very well pleased with my situation out hear. I have 85 akers of land for which I paid eight hundred and twenty dollars it is a first rate peace of land to the size of it all the falt it has there is two little of it...it has a comfortable one story dwelling house on it wetherboarded on the outside and plastered inside it has a kitchen to the end of it. it has a stabel & corn crib smoke house etc there was about 20 akers cleared and in cultivation when I bought it there was about 24 akers deadened and ready for clearing up and fencing I have had one of my brothers sons highered since the 25th of March at ten dollars per month wee have cleared and fenced about 12 akers since that time we have about 16 akers in corn. . . I have earnt nine dollars harvesting besides cutting 84 dozzon on the shears I put it up in shock and get one half (wheat) a man that is able to work and is so disposed neadent ever be idle. . . I did loose half the day yesterday fishing with a sane. . . there was seven in company we had between a peck and a half booshel a peace my mooving out here and fixing up to farm has cost me a good deal but I am better fixed than ever I have been.<sup>36</sup>

These sentences clearly reflect a man who had worked hard, improved his situation, and was proud of his achievement. However modest his success might appear to others, it was a worthy reality to him, and he must have been typical of thousands of his contemporaries.

Regardless of how well newcomers to the State may have succeeded economically, there were some

<sup>35</sup>*Ibid.*, July 12, 1849.

<sup>36</sup>Unsigned fragment of letter in James D. Davidson Collection.

who felt that they could do better elsewhere. Iowa, in the early 1850s, and Kansas, in the later years of the decade, attracted many Hoosiers. An Indiana farmer, referring to the fact in a letter to his brother who had already moved to Iowa, wrote: "You said something about my not having the Iowa fever yet. I am clear of it yet I think that Harrison has got a light attack of it." He continued:

You said something about hog raising. I want to make five hundred dollars at it this fall hogs are worth \$3.50 here now. . . I can tell you that I have got a full match for my brown mare, they are worth one hundred dollars apiece. I have been clearing ground this winter and spring and have just got ready for the twenty acres I want to go to sowing oats tomorrow morning. . . I am going to plant fifty acres of corn 16 acres of oats and 5 of timothy.<sup>37</sup>

By implication, this Hoosier was saying: why go to Iowa when one can clear an additional 20 acres on the Indiana homestead as new ground was needed? The letter also shows appreciation of the opportunities afforded by hog raising, and pride in matched teams of valuable horses.

Similar problems were discussed in a more pessimistic tone by another farmer in 1859.

I have a right smart crop of corn planted some seventeen acres and have cleared up some ground and made fence. . . I am doing my best but luck seems to be against me. . . we are too far north here I would go west but Iowa is too cold Kansas not settled and Missouri a slave state. Indiana is good enough for me and if I can get a home here that suits me I will stay.<sup>38</sup>

Here, in essence, was the problem of the pioneer farmer—getting a home. Adverse weather, crop failures, ill health, and poor management were the factors, all lumped together under the term "bad luck," which might hinder him in this objective. No matter how hard he might work, he had to use intelligence and also have a reasonable amount of luck in order to succeed.

As a generalization for the period under discussion, it is reasonable to say that the good seasons with bumper crops and the bad ones with a consequent scarcity evened up in the long run, and the increasing foreign and domestic market for foodstuffs kept up with production.

The first growing season of the decade was not

<sup>37</sup>John B. Durham to Samuel W. Durham, Brownston, Mar. 28, 1852.

<sup>38</sup>A. Landis to James T. Embree, Bristle Ridge, May 29, 1859.

good. A severe drought in the early summer affected most of Indiana as well as other States nearby. The wheat yield was poor, and grass was unusually short. The oat crop was a total failure, and much of the corn failed to come up. Except for early potatoes which were all right and the fruit crop which was fair, it was a bad season.<sup>39</sup> On the other hand, 1851 seems to have been a good year, and in 1856 the corn crop was so large that the farmers did not have enough hogs to consume it.<sup>40</sup> In 1858 the season was very wet. Corn planting was held up, and some was scalded or washed out.<sup>41</sup>

The farming methods of the 1850s were such as might be expected in a period of transition from frontier to modern conditions. Horses were used far more commonly than oxen, but the latter were by no means rare and were preferred for breaking the tough prairie sod.<sup>42</sup> New ground totaling 3,000,000 acres was brought under cultivation during the decade.<sup>43</sup> This fact alone meant a great deal of work with ax and saw; it meant splitting rails for additional fences and difficult cultivation for a few years. Because of the stumps, the corn had to be planted by hand and cultivated with a hoe. It was also cut, shocked, and husked entirely by hand, and the bulk of it was stored in open cribs made of rails. The corn planter could be used where the ground was relatively free of stumps. With wheat there could be more recourse to machinery, but it was still sown broadcast. The same was true of oats. The reaper had been introduced, and it was being used increasingly to harvest grain. It was a genuine labor and time saver, for handling a cradle was very arduous and slow work. Threshing machines had also appeared, but the more common method was trampling out the grain on the barn floor. The fanning mill had largely replaced the old practice of winnowing the grain from the chaff by hand.<sup>44</sup> Marketing, however, was still difficult with country roads almost impassable during much of the winter and spring.<sup>45</sup>

There were various minor tasks which kept the

farmer continually busy. For example, weeds had to be kept down in fence corners, and corners were plentiful in the old rail snake-fences. Usually they were cut with a scythe in August, before they could seed and scatter. Manure had to be hauled to the poorest ground of the farm, and fences required considerable mending from year to year.<sup>46</sup> Animals frequently strayed from home; the local papers constantly carried notices of missing cows and horses,<sup>47</sup> and in some localities earmarks were still used on animals for identification.<sup>48</sup> In early spring maple-sugar camps were opened, and large quantities of maple sugar were made, chiefly for home use, but also for export. A Virginian, teaching school in Indiana, wrote of the prevalence of sugar making. "This is sugar season now. Nearly every farmer about here has a 'camp' and are now at work in them. The molasses they make are as clear as honey."<sup>49</sup>

A rather unusual occupation was that of a New Yorker with a penchant for orderliness. He wrote: "We are clearing up some corners of the place & making the place look a little more square. The Hoosiers are great for getting their farms as far as possible from being square."<sup>50</sup> Evidently, the ordinary farmer kept busy enough without worrying about the appearance of his farm, and land was still too plentiful to consider straightening out kinks for the sake of efficiency.

The farmer's labor was largely an individual matter; occasionally, labor was exchanged, and young men frequently hired out by the month. Some cooperative enterprises such as barn raisings and husking bees were engaged in as much for social intercourse as economic efficiency.

If the farmer kept busy, it is a commonplace that his wife was doubly so. One Quaker housewife wrote to another:

I will now give thee some account of my work since yearly meeting, and thee will not think I have been very idle. I have spun about thirty-five pounds of

<sup>39</sup>Fort Wayne *Sentinel*, June 29, 1850.

<sup>40</sup>A. H. Davidson to J. D. Davidson, Indianapolis, July 18, 1856.

<sup>41</sup>A. Landis to James Embree, Ashley's Mills, June 17, 1858.

<sup>42</sup>Ade, *Newton County*, 304-305.

<sup>43</sup>Esarey, *A History of Indiana*, 2:585.

<sup>44</sup>David Turpie, *Sketches of My Own Times*, 69 (Indianapolis, 1903).

<sup>45</sup>W. Bittle to William Bradshaw, Greencastle, Mar. 4, 1853.

<sup>46</sup>Agreement between Elisha Embree and Benjamin Wallace, tenant.

<sup>47</sup>The Logansport *Pharos*, Jan. 9, 1861, listed 5 stray cows, 2 horses, and 1 sheep. This is but a single example.

<sup>48</sup>The Markel Collection includes photostats of registered earmarks used in Vigo County.

<sup>49</sup>W. W. Keever to James Davidson, Poland, Clay County, Feb. 20, 1860.

<sup>50</sup>John Baird to Charles Pollock, Wabash, Jan. 7, 1860.



rolls, wove over forty yards, and cut out and sewed about sixty yards into coats, pantaloons, shirts, dresses, and other garments besides all our washing and a greater part of the other work, but I have worked a little harder sometimes than I want thee too.<sup>51</sup>

This represents about six months of spinning, weaving, and sewing—work very generally done by women in the decade of the fifties. Many augmented the family income by selling the surplus products of their toil. It was becoming more common for farmers to purchase dry goods rather than to manufacture them at home, but cutting, fitting, and sewing for the family was almost universally done by the women. A store-bought suit of clothes was a rarity. A man might make such a purchase for his wedding but seldom for any other occasion. A common practice was to exchange wool at a woolen mill for jeans and linsey, from which to make the clothing for both men and women. People came to the mill at Yountsville in Montgomery County from a distance of over 60 miles.<sup>52</sup>

Other work done by women on farms as part of the regular routine included making butter, cheese, soap, and sometimes candles, gathering and drying various kinds of fruits,<sup>53</sup> plucking geese and making featherbeds, making quilts and comforts, and knitting socks and mittens. Add to this the preparation of meals, general housework and cleaning, and responsibility for children and animals while the man of the family worked beyond call, and the work of rural women assumes really tremendous proportions.

The tenant farmer also deserves consideration. His relations with his landlord are well illustrated in the papers of Elisha Embree of Princeton, an ex-Congressman who owned a number of farms. The tenant seldom paid his full rent in cash, but sometimes a portion was paid, in order to reduce the landlord's share of the crops. In "grain rent" the tenant gave the landlord one-fourth of the wheat and one-third of the oats that he produced.

Hay, too, was shared, but not the pasture or garden or any of the smaller crops. If a tenant undertook to farm a larger amount than usual the landlord might agree to furnish a hired man; when he cleared and cultivated new ground the owner expected no

share from the first year's crop. For splitting rails, moreover, the landlord paid the tenant, usually at the rate of \$1 per hundred.<sup>54</sup>

Rentals were generally renewed from year to year. One contract between Embree and a tenant is of particular interest because of the unusual terms and the description of the home buildings. The farm was entirely unimproved, and the tenant rented it for a 7-year term, paying only by the improvements he made. He was to build "on the rise in the southwest corner of said ground, a good substantial cabin of good materials, to be hewed or well scutched down, with a brick chimney . . . the roof to be framed and boards nailed on, the upper and lower floor to be good plank—said house to be 20 feet by 16 feet with a porch on one side and a room on one end of the porch for a kitchen." The cabin was to be sufficiently high to have a bedroom above the stairs. Within the period of his lease, he was also to construct a stable, smokehouse, and corncrib, dig a well, and clear and cultivate 15 acres. Embree was to furnish the nails, the mill plank, the bricks, and the doors for the house, but the tenant was to supply the labor and provide the rest of the materials out of timber he cleared from the farm. The rails from the cleared land were to go to Embree. A final provision was that "all handsome shade trees around said house are to be carefully preserved for shade and ornament."<sup>55</sup>

As the sharecrop method of renting suggests, money was scarce among the farmers. They had plenty of produce, but they had difficulty converting it into cash. Trading animals, where only a small amount of cash was needed to even the bargain, was very prevalent. The housewife tried to pay for her small store purchases with eggs, butter, beeswax, and other commodities. A common practice among farmers was to give promissory notes for debts, making them payable 30, 60, or 90 days after the harvest.<sup>56</sup> Sometimes the farmer was forced to mortgage his livestock to guarantee payment of a note. One such case included the mortgage of 5 hogs, a yearling sorrel mare, 1 yellow and 1 spotted cow, and 3 six-month-old calves.<sup>57</sup> Public sales were frequent on farms, but very liberal terms were extended. The terms of one sale were cash for purchases of \$3 and under, with

<sup>51</sup>Dinah Carson to Mercy Carson, West Grove, Hamilton County, Apr. 17, 1859.

<sup>52</sup>Ade, *Newton County*, 303.

<sup>53</sup>Usually fruit was dried in the sun, but occasionally kilns were used. Elizabeth George to Mercy George, New London, Oct. 28, 1853.

<sup>54</sup>Agreements between Elisha Embree and Benjamin Wallace, 1850; Embree and Joel Stuart, Nov. 27, 1852; and Embree and William Biven, Oct. 1, 1852.

<sup>55</sup>Agreement between Elisha Embree and James Minnes, Feb. 15, 1854.

<sup>56</sup>Turpie, *Sketches of My Own Times*, 24.

<sup>57</sup>Mortgage executed Nov. 28, 1854, Embree Papers.



9 months credit for larger sums, if good security were offered.<sup>58</sup> Such terms were probably not unusual.

The wages of agricultural laborers were not very high. The workers were usually young men of 15 and upwards or older unmarried men. They lodged and boarded with their employer, who in addition paid them a monthly wage, varying from \$8 to \$20 according to the age, ability, and dependability of the hired man.<sup>59</sup> It also varied with the locality and general economic conditions. In 1860 the average monthly wage for such a worker in Indiana was \$13.71; the average daily wage was 73 cents with and 98 cents without board. Hired girls were paid an average of \$1.28 per week, plus board, for domestic work.<sup>60</sup>

The prices a farmer received for his products varied with the season and the condition of the crops, but taken as a whole there was a gradual increase from 1850 to 1860. In 1850, eggs brought 4 cents per dozen in summer and 10 cents in winter; by 1860 the price range seems to have narrowed to from 7 to 10 cents. Butter, worth from 8 to 12½ cents a pound in 1850, advanced by 1860 to from 10 to 15 cents. Beef rose in the same decade from \$3 per hundredweight to from \$4 to \$5, and pork was worth 50 cents more per hundred than beef. Wood advanced in the period from \$1 per cord to \$2 or more. Wheat in the earlier years was worth from 50 cents a bushel in September to 90 cents in May, but by the close of the period September wheat stood at about 80 cents while May wheat brought as high as \$1.50. The price of flour similarly increased from \$2.50 to \$5 per barrel in 1850 to from \$5 to \$8 in 1860. Corn fluctuated considerably in value; the average price for the fifties was perhaps 40 cents per bushel. Oats probably averaged 30 cents, and rye 40 cents. Lard sold for 10 to 12 cents per pound, feathers for 25 cents per pound and wool anywhere from 15 to 30 cents a pound. Live chickens brought a nickel or dime apiece, depending on age and size.<sup>61</sup>

<sup>58</sup>St. Joseph Valley Register, Nov. 20, 1851.

<sup>59</sup>"Jerry Roberts, colored boy comes to work for me on the farm at \$8 per month." Diary of Nathaniel Preston, Mar. 11, 1850.

<sup>60</sup>U. S. Census Office, 8th Census, *Agriculture*, 1860.

<sup>61</sup>These prices are from a variety of sources, including the following: Indianapolis *Daily Journal*'s wholesale market reports; Elkhart *Review*, 1859, market reports; Coffin & Cains, *Account Books*, Economy, Indiana, 1850-1860; Account book among the papers of Dr. Edward W. Chittenden, Vernon, Indiana, 1849-1852.

"The hog," according to the rather literary secretary of the Marion County Agricultural Society, "has been called the 'staple crop' of Indiana, and in certain sections of the country where the people pride themselves on their refinement, wealth and education, 'hog and hominy' are supposed to be the only articles of food on a Hoosier farmer's table." This statement the secretary denied and concluded that "Taking the widest range of metaphor we might call the hog the 'condensor' of the farm."<sup>62</sup> The writer was correct, and there is concrete proof that the hog brought in money after having "condensed" the corn. A northern Indiana farmer shipped 209 hogs averaging 242 pounds to Buffalo, where they sold for \$5.65 per hundredweight, and, after deducting freight, weighing, handling, feed, and commission charges, netted the farmer nearly \$11 each.<sup>63</sup>

With reference to corn production, the *Indiana Gazetteer* for 1850 says:

Corn is the great staple of the state. It is easily cultivated and almost every farmer has from 20 to 100 acres. A single hand can prepare the ground, plant, attend to, and gather, from 20 to 25 acres. . . . The product is usually from 35 to 75 bu. an a., averaging about 45. . . . Corn usually sells at from ten to thirty cents a bushel, millions of bushels being sold in the interior to fatten hogs and cattle, at not exceeding the former price. It is the main article of food for both man and stock, and can be cooked in a great variety of ways, so as to be equally acceptable at the tables of the poor and the rich.<sup>64</sup>

In 1853 the Cass County Agricultural Society awarded a premium to a farmer who manured every hill of corn on an acre and produced 103 bushels at a total expense of \$19. Since the corn sold for 34½ cents per bushel his profit on the acre was \$16.57.<sup>65</sup> Such a yield was, of course, phenomenal, and is today.

More typical is the case of an actual but prosperous and progressive farmer, Hiram Bacon, who owned a large and fertile farm just outside of Indianapolis. Two hundred of its 350 acres were under cultivation. The following is a synopsis of his products in 1852: 70 acres of corn yielded

<sup>62</sup>Indiana State Board of Agriculture, *Annual Report*, 1856, p. 235.

<sup>63</sup>James F. Bippus Collection, December 1860.

<sup>64</sup>E. Chamberlain, *Indiana Gazetteer*, 35-36 (ed. 3, Indianapolis, 1850).

<sup>65</sup>Indiana State Board of Agriculture, *Annual Report*, 1853, p. 60-61.

4,000 bushels valued at \$800; 70 acres of wheat yielded 1,650 bushels valued at \$825; 30 acres of barley yielded 600 bushels valued at \$375; 7 acres of oats yielded 300 bushels valued at \$45; the pork had a total value of \$318; the butter and cheese, \$500; the calves, \$50; and the orchard products, \$100. The total value of all was \$3,013.

The farm which Bacon had occupied for 30 years was stocked with 6 work horses, 25 milch cows, 100 hogs, 60 sheep, and 25 young cattle. Among other machinery, he possessed a self-raking grain reaper, a threshing machine capable of threshing 300 bushels per day, and a corn sheller, run by horse power, which could shell 300 bushels per day.<sup>66</sup>

The articles purchased by the farmers fall into three categories—first, clothing, drygoods of all kinds purchased by the yard, and ready-made articles, chiefly shoes; second, tools and articles of household equipment; and third, such food supplies as could not be raised on the farm. In account books of country general stores further details about each of these three classes of goods are revealed.

Calico, the cheapest material for women's dresses and also used for men's shirts, came in several grades, ranging in price from 12½ to 18½ cents per yard.<sup>67</sup> There was also what was known as "hickory shirting" at 16½ cents a yard. Better dress materials were gingham and lawn at 25 cents, while muslin for petticoats cost 9 cents a yard. A list of sales actually made in the early fifties will illustrate the quantity and variety as well as the prices paid: 18 yards of calico, \$2.25; 3 yards of cassimere, \$2.40; 7 yards of canton flannel, \$1.05; 2 yards of Irish linen, \$1.00; 2 yards of gingham, 60 cents; 4 yards of red flannel, \$2.00; 3 yards of fine muslin, 60 cents; 15 yards of lace, \$1.75; 4 yards of silk, \$3.50; 4 yards of flannel, \$1.50; 40 yards of gingham, \$10.00; 5 yards of tweed, \$1.25; pants, vest and "trimmings," \$6.45.

Shoes varied in price from 75 cents to \$1.40; a pair of slippers cost \$1.15, boots, \$3.50, while a pair of fine calf boots retailed for \$4.25. Among other articles of dress purchased were the following: 1 pair of leather gloves, 65 cents; 1 pair of suspenders, 25 cents; 2 palm hats, 1 at 12 cents, 1 at 25 cents; 1 bunch of hairpins, 5 cents; 2 pairs of

stockings, 60 cents; 1 coat, \$7.50; 1 vest, \$3.75; 1 pair of pants, \$3.00. The last three items were all sold to the same customer but at separate prices, not as a suit. Bonnets could be purchased for a dollar, or for much more if one wished. Young men before going courting often purchased "one silk handkerchief, \$1.00" or "one black silk cravat, \$1.20." These were about the only extravagances people allowed themselves, unless whalebone for corseting is put in this class.

Some tools were absolutely necessary, and a number of household articles were difficult to make and hard to get along without. Purchases of tools, appearing in the account books, included axes at \$1.25 each; handsaws at \$2.50; hatchets at \$1.00; foot adzes, \$2.12; a set of carpenter's tools, \$16.50; nails, 6 cents per pound; scythes, \$1.25; files, 75 cents; lanterns, \$1.00; pocketknives, 35 to 65 cents; and barlows, 10 cents each.

Among the more frequently purchased household goods were the following: candles, 12½ cents per pound; candlewick, 25 cents per pound; a set of knives and forks, \$1.30; a set of plates, 80 cents; cups and saucers, 60 cents; 6 fluted tumblers, 60 cents; 3 stone crocks, 38 cents; a pair of brass candlesticks, 70 cents; a table cloth, \$1.25; 9 yards of bedticking, \$1.13; a chamber pot, 40 cents; bed cords, 30 cents; a broom, 20 cents; a washtub, \$1.15; a shoe brush, 15 cents; a psalmist, 75 cents; a silver lever watch, \$20; a steel watch chain, 50 cents.

Of the few staple foods purchased by country folks sugar cost from 8 to 10 cents per pound; tea, 25 cents per quarter pound; coffee, 15 to 20 cents per pound; rice, 8 to 10 cents per pound; molasses, 40 to 50 cents per gallon; and salt, \$2.25 to \$2.85 per barrel. Occasional purchases included: starch, 12½ cents per pound; "¼ bbl. fish, \$7.00"; Epsom salts, 18 cents per pound; and oil, \$1.00 to \$1.25 per gallon. A very frequently recurring item was saleratus at 10 cents per pound. Tobacco cost from 25 to 35 cents a pound, and one sale of 10 cigars for 10 cents is recorded.

The few household articles found in the pioneer farm home were for use rather than ornament and were not of great value. One personal estate, with each article appraised, was valued at approximately \$200. This figure is perhaps average or a little higher. Listed in the inventory were the following: half a dozen splint-bottomed chairs, \$2.50; shovel, tongs, and irons, \$1.60; a bureau, \$5.00; a cupboard, \$7.50; a bookcase, \$3.00; a family Bible,

<sup>66</sup>Indianapolis *Daily Journal*, Dec. 16, 1852.

<sup>67</sup>All data on items purchased by farmers are from the account books cited in note 61.

25 cents; a breakfast table, \$2.50; an old cooking stove, \$2.00.<sup>68</sup>

As to prices of livestock and farm machinery, very little information has been obtained. Good horses seem to have sold for \$90 to \$100 each, but they undoubtedly could be bought for much less if one were not intent on securing the best.<sup>69</sup> In 1852, an English traveler bought in Indianapolis a complete outfit for making a journey to Terre Haute. He paid \$190 for his team of horses; he had a wagon built by a German wagonmaker for \$78.50; and he paid \$20 for the harness. As he was a gentleman of means we may conclude that these prices were rather high. When he drove down the main street of Indianapolis for the first time, he had three separate offers for his outfit.<sup>70</sup> No doubt good farm horses could be bought for \$50 or less, and at sales cows could be had for as low as \$10 or \$12.<sup>71</sup>

Threshing machines were very new at the beginning of the fifties. One, said to be new and in good order and to have cost \$250 in Rochester, New York, was offered for sale on "liberal terms" at Fort Wayne in the spring of 1850.<sup>72</sup> Threshers first came into general use along the National Road. The early machines were quite crude and could thresh no more than 30 to 60 bushels of wheat a day.<sup>73</sup> Power was furnished by a treadmill device or by 4 teams of horses pulling a large rotating wheel. By 1860 threshing machines were manufactured in Indiana under several different patents.<sup>74</sup>

McCormick reapers were being sold throughout the State in the 1850s. The reaper was improved so rapidly that the earlier machines went out of date very quickly. In 1854 a reaper made in 1850 had no resale or market value at all, and the agent for McCormick reapers spoke as glibly of the '52, '53, and '54 models as a modern automobile salesman does of the latest Ford. He found many

eager customers, but a good part of the farm land was too stumpy for successful use of the reaper.<sup>75</sup>

Patent stump extractors and patent sheep-shearing machines, were available but they do not seem to have worked very well.<sup>76</sup> Richard J. Gatling, later famous for his military inventions, was in Indiana during this time experimenting more pacifically, if less successfully, with agricultural machinery.<sup>77</sup> The use of machinery spread more rapidly in the prairie region than in other parts of the State as the farms there were larger and less stumpy.<sup>78</sup>

It is a demonstrable fact that Indiana made greater farm progress in the decade from 1850 to 1860 than any other State in the Old Northwest, which probably means greater than any other State in the Union. Growing corn and wheat and raising hogs and cattle were the most important farming activities. The absolute production was not greater for all four items, but the improvement for Indiana during the decade is more apparent and the decreases are less marked.<sup>79</sup>

In the production of corn per acre of cultivated land, Illinois stood first and Indiana second in both 1850 and 1860. Their yields were almost equal, and much greater than Ohio, Michigan, and Wisconsin. Both States diversified their agricultural production in the fifties at the expense of corn; but, whereas Illinois produced a bushel more per cultivated acre of land in 1850 than Indiana, by 1860 this advantage was cut to a mere two-tenths of a bushel.

Indiana's gain in wheat production during this decade, from last to third position, is most remarkable and without parallel among any of the other States in the region. Wheat production increased eight-tenths of a bushel per cultivated acre while output in other States was standing still or declining. Wisconsin had the best wheat land of the five, with Michigan a poor second in both 1850 and 1860.

A similar record was made in respect to cattle. The Hoosier farms in 1850 were more poorly

<sup>68</sup>A. D. Hagen to C. H. McCormick, Logansport, Dec. 5, 1854.

<sup>69</sup>Elkhart Review, Oct. 1, 1859; Aaron L. Benedict to Aaron Pleas, Peru, May 27, 1855.

<sup>70</sup>R. J. Gatling to John B. Niles, 1850.

<sup>71</sup>Turpie, *Sketches of My Own Times*, 116-123.

<sup>72</sup>The generalizations presented here are based on analyses of the data from the Federal censuses of 1850 and 1860.

<sup>69</sup>Inventory of personal estate of Jacob Carson, deceased, by Uriah Carson, executor, and appraised by Mark Mills and Josiah Russell, Jan. 3, 1856.

<sup>70</sup>Receipt, "Wm. Bradshaw bot of Geo. P. Stevens 1 grey Horse, \$90.00, Aug. 5, 1854."

<sup>71</sup>Beste, *The Wabash*, 1:275-278.

<sup>72</sup>James S. Mix to William Gray, July 12, 1849.

<sup>73</sup>Fort Wayne *Sentinel*, Apr. 20, 1850.

<sup>74</sup>Benjamin S. Parker, "Pioneer Features," *Indiana Magazine of History*, 4:18-21 (1908).

<sup>75</sup>The New Albany *Weekly Ledger*, Sept. 5, 1860, noted that P. H. Kell patented a machine in 1856 which was manufactured in New Albany.

stocked than those of any of the neighboring States, but before the decade ended Indiana tied Illinois for first place. The number of cattle per farm increased from 6 to 10 head, while the other States again lost or remained stationary.

Indiana was the greatest pork-producing State in the Union, both in 1850 and 1860. In 1850, the Illinois farms were better stocked with hogs than those of Indiana—each Illinois farm averaging one more hog than a corresponding Hoosier farm. By 1860, however, Indiana's supremacy was unchallenged, its average per farm having been lowered by one half pig while Illinois had lost  $7\frac{1}{2}$  pigs per farm. There were 2 hogs and an extra ham for every man, woman, and child in Indiana in 1860, or a swine population of about 90 to the square mile. Hog production decreased somewhat in all five States during the decade.

There are at least two explanations for Indiana's greater progress in this decade. One is that the State had been more backward than the others before 1850, and the improvement was somewhat overdue. There is probably some truth in this. If it has any validity here, however, it must be restricted to the raising of cattle and wheat and cannot possibly apply to hogs and corn. A more plausible explanation is that Indiana's great rural advance was the result of slower industrial progress than the other States. In 1860, farmers made up 47 percent of all men employed in Indiana as compared with 40 percent in Wisconsin, 39 percent in Illinois,  $37\frac{1}{2}$  percent in Michigan, and  $34\frac{1}{2}$  percent in Ohio.

What role did the various sections of the State play in these agricultural advances? In general the answer may be stated thus: each section paid particular attention to increasing the production of those commodities which had previously been neglected. Earlier the tendency had been to grow the crop that was easiest and most naturally adapted to the land of a given section. In the fifties, without giving up specialties entirely, the trend was to develop the less natural characteristic products. Thus the north and central sections doubled wheat production during the decade, but the south, hitherto a poor wheat-growing area, tripled its production. Similarly corn and hog production which had been preeminent in the southern part remained nearly stationary. At the same time there was a material increase in the central and northern sections.

In 1860, the best corn-producing counties of the State, ranked on the basis of bushels per acre of

land under cultivation, were Clinton with 24 and Benton with 23 bushels. Next in order, but considerably below these two stood Gibson with  $14\frac{1}{2}$ ; Tippecanoe and Howard, 14; Fountain, Johnson, Shelby, Vigo, and Posey,  $13\frac{1}{2}$ ; Rush, Bartholomew, and Hamilton, 13; Parke,  $12\frac{1}{2}$ ; Knox, 12; and Marion and Morgan,  $11\frac{1}{2}$  bushels. In absolute production Tippecanoe County led with 2,384,000 bushels in 1860 and Clinton was second with 2,102,000 bushels. DeKalb was the poorest corn county with only 94,000 bushels in 1860, but this figure is so low that its accuracy may be questioned.

The hog-raising area does not coincide absolutely with the list of the best corn counties but eight of the seventeen counties named above had over 40,000 hogs in 1860. Rush County with 75,000 hogs led the counties from Rush on the east to Parke on the west and from Jackson on the south to Hamilton on the north. Wayne and Gibson counties were the only ones with more than 40,000 hogs that lay outside this compact central group.

The area of greatest wheat production embraced a different portion of the State. In general, the best wheat land lay northeast of a line drawn from Jennings County on the south to Porter County on the north. To this should be added 5 counties of the extreme southwest and the isolated counties of Parke and Harrison. On the basis of the greatest number of bushels per acre of improved farm land, St. Joseph County led with 4 bushels per acre followed by Cass, Carroll, and La Porte with  $3\frac{1}{2}$  bushels; and Elkhart, Marshall, Kosciusko, LaGrange, Noble, Miami, Bartholomew, Ripley, and Ohio, with 3 bushels. In absolute production, La Porte was ahead with 430,000 bushels and Elkhart second with 370,000; Benton was poorest with only 5,000 in 1860. Bartholomew County was the only one to rate among the highest for hogs, corn, and wheat.

The leadership in other aspects of agricultural production was distributed among various counties and in some cases shifted considerably from 1850 to 1860. Montgomery County led in the number of beef cattle in both 1850 and 1860, but Putnam, Tippecanoe, Warren, Wayne, Ripley, Hendricks, and Allen counties also raised large numbers. With over 7,000, Montgomery also assumed the lead in milch cows in 1860, which Wayne County had held a decade before. Other important counties for milch cows were Rush, Tippecanoe, Franklin, and Ripley. Montgomery also held the primacy in respect to horses, both at the beginning and end of the decade. It was the only county with over



10,000 horses in 1860, but the counties on either side of the National Road, notably Wayne, Rush, Hendricks, Shelby, Putnam, and Tippecanoe, had large numbers. By 1860 Montgomery had taken the leadership in the production of sheep and wool from Putnam, whose number of sheep fell off 50 percent during the decade. Lagrange was second in sheep raising in 1860. The largest number of working oxen in 1850 was found in Kosciusko, Lagrange, La Porte, and Elkhart, but the decade saw considerable increase in Tippecanoe, Fulton, Grant, Starke, and some of the southern counties.

Consistently large oat crops were grown in Wayne, Washington, and La Porte counties. Wayne produced 202,000 bushels in 1860. Other counties producing over 100,000 bushels the same year were Allen, Bartholomew, Franklin, Hendricks, Jackson, Marion, Montgomery, Putnam, Randolph, and Rush. Considerable rye was grown in Tippecanoe (41,000 bushels in 1860) and Owen counties. Switzerland grew the most Irish potatoes in 1850, but by 1860 Allen County led with 155,000 bushels, followed by Marion and Elkhart. Hay production centered in the extreme northwest; Lake County led in 1860 with 24,000 tons. The extreme northern counties of Elkhart, Lagrange, and Noble produced much larger amounts of clover seed than any others. Elkhart was the greatest maple-sugar county both in 1850 and 1860, with 155,000 pounds in the former year and 128,000 in the latter.

Barley production and also the making of malted liquors centered in the southeast and southwest corners of the State. Ripley County grew large crops of hops. The only considerable amounts of tobacco were produced in Spencer and Greene counties. Henry County led in orchard products, followed by Wayne and Marion, while Gibson County was already developing its famous melons and other market-garden products.<sup>80</sup>

The agricultural progress of the fifties found expression in the movement for county and State fairs which swept the United States at that time. These fairs may be taken as an indication of an increasing pride in the quality and quantity of farm produce. No longer was the farmer simply bent on making a living; he was now producing for a profit. Hence his interest in improved farm machinery, increased yields per acre, and

better livestock through breeding. Insofar as Indiana was concerned, there is no doubt that most of the credit for furthering these interests must be accorded to Governor Joseph A. Wright,<sup>81</sup> who was not and had never been a farmer, but who made agricultural improvement his hobby because he appreciated the fact that four-fifths of the people of the State which he governed made their living by farming.<sup>82</sup> Only his political enemies said that he advised farmers to improve their sheep by the use of hydraulic rams,<sup>83</sup> but even his friends had to admit that he sent a ball of hair from the paunch of a cow to the world's fair. He liked to speculate concerning this ball of pig bristles, which he regarded as a scientific curiosity, but his enemies said that it was an unfair specimen of the resources and industries of the State.<sup>84</sup> However, Wright did organize the State Board of Agriculture on February 14, 1851 and became its first president.<sup>85</sup>

A few county fairs had already been held,<sup>86</sup> but the State Board of Agriculture sponsored the demand for a State fair. The legislature appropriated \$2,000 toward the project,<sup>87</sup> and the first State fair was held at Indianapolis, October 19-25, 1852. The attendance was estimated at 15,000 on the first day and 25,000 on the second. It was thought that the agricultural exhibits were not so extensive as they might have been although mills from all over the State had flour on display. All told there were 3,100 entries of exhibits ranging from plows to pickles and from sorghum to steam engines. Among the mechanical exhibits, patented and made within the State, were Reynold's Indiana bran duster and regrinder, Hollingsworth's patent washing machine, Hewitt's patent hay and cotton press, Mendenhall's Excelsior churn, and Coffin's ice cream freezer. Singer, Wilson, and Howe sewing machines were prominently dis-

<sup>81</sup>Turpie, *Sketches of My Own Times*, 135.

<sup>82</sup>Indiana State Board of Agriculture, *Annual Report*, 1852, p. 5.

<sup>83</sup>William W. Woollen, *Biographical and Historical Sketches of Early Indiana*, 94-103 (Indianapolis, 1883).

<sup>84</sup>Logansport *Journal*, Nov. 12, 1853.

<sup>85</sup>William R. Holloway, *Indianapolis, A Historical and Statistical Sketch of the Railroad City*, 94-95 (Indianapolis, 1870).

<sup>86</sup>For example, an announcement of the first Wayne County fair, held at Richmond in October 1851, appeared in the Indianapolis *Indiana State Journal*, Apr. 26, 1851.

<sup>87</sup>Indianapolis *Daily Journal*, June 17, 1852.

<sup>80</sup>Indiana State Board of Agriculture, *Annual Report*, 1857, p. 349-359, 385-391.

played.<sup>88</sup> Wayne County took most of the awards for fine cattle, but the other livestock prizes were widely distributed over the State. Another feature was an agricultural essay contest in which prizes were given to Benjamin Reynolds of White County, who wrote on the reclaiming of swamp land; J. T. Smith, of Rush County, who submitted a plan for a farmhouse and barn; and B. Lawrence of Monroe County, who discussed the best ways to use hilly lands.<sup>89</sup>

The first State fair was assuredly a success, and other cities felt they should be allowed to hold one. Indianapolis was not yet large enough, and transportation facilities were too bad to give the capital city, with its central location, a clear advantage over its rivals. In 1853 the fair was held at La Fayette, the principal attraction being an address by Horace Greeley to the members of the Indiana State Agricultural Society.<sup>90</sup> The next year the fair was held at Madison, but compared to the two previous gatherings, it was financially a failure. Charges were made that the Madison merchants and innkeepers profited at the expense of those attending,<sup>91</sup> so for the next four years it was again held on the military grounds at Indianapolis. In 1859 the fair was held at New Albany, but it soon became a fixed custom to have it at Indianapolis.<sup>92</sup>

County fairs became more prevalent during the fifties. In 1858 it was reported that 37 were held in Indiana, 34 in Ohio, and 14 in Illinois.<sup>93</sup> At these fairs a favorite competition was the plowing match, in which the contestants were both to hold and drive and were judged on skill and workmanship.<sup>94</sup> Another common feature and great attraction was the riding contest for ladies. By 1858 a great many farm implements were shown at all the county fairs including the subsoil plow, harrow, cultivator, corn plow, grain drill, horse rake, corn sheller, straw cutter, threshing machine, farm wagon, corn planter, reaper, mower, and the reaper and mower combined.<sup>95</sup> Farmers had an opportunity to see all of these implements actually at work, because the fairs provided a

convenient place for manufacturers to display their products in the most convincing way.

Newspapers began adding agricultural columns as regular departments. In 1850, Chicago promoted a Great National Agricultural Fair, which numerous Hoosiers attended, since the railroads reduced their fares by one half for the occasion.<sup>96</sup> One Indiana pioneer farmer, Solon Robinson of Lake County, who had formed a squatters' union there in 1834 became a nationally known agricultural authority in the fifties. After an unsuccessful effort to found a monthly farm magazine of his own, in 1853 he accepted Horace Greeley's invitation to become agricultural editor of the *New York Tribune*.<sup>97</sup>

The formation of agricultural societies stimulated a great deal of interest in improving livestock and in using fertilizers and better methods of cultivation to produce larger crop yields. Some of the inquiry and experimentation went into unfruitful channels, as when a farmer of Wayne County made a gallon of molasses from a bushel of Broadwell apples,<sup>98</sup> or Henry L. Ellsworth attempted to fatten hogs on meal made from ground corncocks.<sup>99</sup>

The improvement in cattle was genuine, although it met with some opposition. This is rather dramatically portrayed in the report of the Marion County Agricultural Society. "The old race of long-legged, slab-sided, sharpened-backed, big-horned and long-haired quadrupeds is rapidly disappearing from the land." This was an assuring prospect, but the writer continued: "The truth, however, compels us to say that we have many men among us, men of ample means, who are such perfect 'know-nothings' that they cannot see the necessity for good stock...and for the good of the country turn out a bull of their peculiar stock to improve the various breeds in the neighborhood; especially in their milking qualities, for these gentlemen sagely remark that, 'if the Durhams replace the scrub stock our children will starve for milk.'" The farmers who were really interested in blooded stock had their own effective way of dealing with the menace,

<sup>88</sup>*Ibid.*, Oct. 23, 1852.

<sup>89</sup>*Ibid.*, Oct. 29, 1852.

<sup>90</sup>*New Albany Ledger*, Oct. 15, 1853.

<sup>91</sup>*Fort Wayne Sentinel*.

<sup>92</sup>Holloway, *Indianapolis*, 95.

<sup>93</sup>*Centerville True Republican*, Sept. 16, 1858.

<sup>94</sup>*Logansport Journal*, Apr. 30, 1853.

<sup>95</sup>*Centerville True Republican*, Oct. 14, 1858.

<sup>96</sup>*Elkhart Review*, Sept. 17, 1859.

<sup>97</sup>Herbert A. Kellar's sketch of Robinson in *Dictionary of American Biography*, 16: 50-52 (New York, 1935); also his *Solon Robinson, Pioneer and Agriculturist: Selected Writings* (Indianapolis, 1936).

<sup>98</sup>*Logansport Journal*, Jan. 21, 1854.

<sup>99</sup>*St. Joseph County Forum*, June 3, 1854.

however, for the writer continued, "it sometimes happens that when their fine animals—emulating the knights of old—go forth glorying in their strength and beauty, announcing their coming in trumpet tones to the denizens of the pastures, they return with drooping heads and sadly marred in their fair proportions."<sup>100</sup>

Hogs were also improved by more attention to breeding and feeding. "The stock of hogs is also receiving attention, and the breed of 'land sharks' is passing away."<sup>101</sup> When pigs ranged the woods and fed on acorns and beech mast, they were bound to be razorbacks, but when they were penned and fed on milk and corn they were sure

<sup>100</sup>Indiana State Board of Agriculture, *Annual Report*, 1856, p. 233.

<sup>101</sup>Delaware County Agricultural Society Report in *ibid.*, 191.

to round out, and the amount of lard was greater and the meat more tender.

Horses, too, were improved and more attention was given to the pedigrees of animals used for riding and driving.<sup>102</sup> In the fifties people were beginning to go more than formerly, and this was reflected in the interest in better horses.<sup>103</sup> The first Percherons are said to have been imported into Indiana by the Whig congressman, George G. Dunn.

Taken all in all the 1850s may be regarded as having ushered in a stage in the development of agriculture and rural life which was destined to remain, and continue to improve, for about sixty years.

<sup>102</sup>*Ibid.*, 1857, p. 534-548.

<sup>103</sup>Woollen, *Biographical and Historical Sketches*, 94-103.

## THE HISTORY OF SETTLEMENT AND LAND USE IN THE BENT CREEK FOREST

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The Bent Creek Experimental Forest near Asheville in western North Carolina comprises 6,302 acres.<sup>1</sup> Of this total 1,472 acres was at one time or another cleared and under cultivation. The clearing of the land dates from about 1795.

<sup>1</sup>This account of the history of the Bent Creek Forest is derived from the following sources: (1) Oral memoirs of three surviving pioneer settlers, Russel P. Lance, Watt Hoxed, and William E. Presley, all of whom spent their lives in or near Bent Creek Valley, and whose fathers and grandfathers lived in, or were intimately associated with, the area from the earliest days of settlement; (2) Timber statistics derived from measurements taken on individual tracts or holdings, thus furnishing a check on the information supplied by the old settlers; (3) Observation of erosion, terracing, fire scars on trees and other data which throw light on the history of land use in the region; (4) Available records, including State land grants, property transfers, Biltmore Estate records, and purchases of the U. S. Forest Service; and (5) John Preston Arthur, *Western North Carolina; A History* . . . (Raleigh, N. C., 1914), and F. A. Sondley, *History of Asheville and Buncombe County* (Asheville, N. C., 1922).

The authors are indebted to Leonard I. Barrett, chief of the division of forest management research of the Forest Service, for invaluable assistance in the preparation of the manuscript.

The first homestead grant was issued to Abraham Randals in 1800, when the entire Bent Creek watershed was still inhabited by Cherokee Indians. Altogether, over 100 homes, ranging from one-room log cabins to large comfortable two-storied buildings, were constructed in the area from 1795 to 1900, when George W. Vanderbilt began to buy up property in the region to develop his vast Biltmore Estate.

*The Original Forest.* Before white settlement, the Bent Creek forest was far different than it is today. The same tree species were present—a multitude of oaks, white, black, scarlet, and northern red, chestnut (now largely dead) in abundance, hickory, yellow poplar (queen of the Appalachians), black walnut, and pitch and short-leaf pines—but the form, density, quality and undergrowth have undergone radical changes. The primeval forest was an almost unbroken canopy of trees; as the old veterans died, young growth rapidly filled in the gaps. The mixed hardwoods and pines grew to large size and produced straight clear stems that make high quality timber.

The mass of undergrowth—laurel and rhododendron—was not nearly so dense as it is today. Annual woods burning, as practiced before Vander-

bilt took possession, kept it killed back and the seeds destroyed. It was possible to ride a horse almost anywhere in the forest, even along the creeks now made impassible with "slicks" of laurel and rhododendron.

The open condition of the forest and the absence of undergrowth provided ideal conditions for stock grazing. Much palatable forage was found between the clumps of laurel, while various grasses, weeds, herbs, young tree seedlings, and wild-pea vines abounded in the coves and on much of the ridge land.

Game—now relatively scarce—was then plentiful. The streams abounded with fish and the woods with deer, bear, raccoons, opossums, squirrels, rabbits, woodchucks, wild turkeys, ruffed grouse, quail, and wild or passenger pigeons. It was possible for a skilled marksman to bring down a half dozen turkeys with a single shot from an old muzzle-loading gun, while the passenger pigeons—now an extinct species—came through in such numbers as nearly to blot out the sun. Often they broke the branches of fruit trees as they alighted for food or rest. Predatory animals, such as wolves and panthers, were always scarce and soon became extinct.

*Passing of the Red and Coming of the White Man.* The Cherokee Nation, to which the Bent Creek Indians belonged, was the largest, strongest, and perhaps the most highly civilized in the United States in the early nineteenth century. There were numerous Cherokee villages and well-kept farms around their center of settlement near what is now Franklin, North Carolina. But from here outward to the limits of their territory, the farms and homes became poorer, until there were only roving bands, living in camps of crude huts, and depending mainly on hunting and fishing for their livelihood. There were two Indian camps on Bent Creek, harboring about 200 individuals.

Bands of white men invaded this territory on hunting trips as early as 1775, and soon a thriving trade in skins and furs sprang up with the Indians. The French Broad River Valley was opened up to legal entry and settlement in 1783, and the first white settlers drifted into Buncombe County about 1785.

In the last decade of the eighteenth century, a flood of homeseekers and land speculators rushed in to secure claims and titles to the most desirable parcels along the larger streams. When these were preempted, it became necessary to take first choice land on second choice streams. It was

from this later migration of homeseekers that Bent Creek Valley was settled.

Here, white man and red lived side by side in perfect harmony until 1838, when the Cherokees were persuaded by Colonel W. H. Thomas, a friend of the Indians who later became their chief, to move peaceably to the Smoky Mountains where, known as the "Thomas Indians," their descendants still reside.

The earliest settlers of Bent Creek were predominantly English, Scotch-Irish, and German. They were industrious, intelligent, and rugged people who had left their homes in the Old World to seek a refuge and freedom from oppression in the New.

*Land Tenure.* Bent Creek developed into a farming community and retained this pattern to the end. The individual farm, worked by the owner and tenant, typified the area.

Landowners, as a rule, were generous toward unfortunate landless folk. Owners of large tracts were glad to permit anyone to cultivate as much land as he could handle. Their main objective was to clear the dense forest and bring the soil under cultivation as soon as possible so that a profit could be realized from their holdings. Those who held smaller tracts sometimes allowed tenants to squat on their land for a number of years.

The tenant was generally permitted to clear land for cultivation, build a dwelling and necessary outbuildings, and construct a split-rail fence around the clearing. In return, he could keep everything produced on the land for 5 years. If he chose to remain thereafter, he was required to give one-third of his crops to the landlord as "rent." The owner always furnished, free of charge, a vegetable garden, wood, and sufficient pasture for normal stock requirements. The agreement usually specified that a crude system of crop rotation was to be followed, that the land was not to be cultivated while wet, and that the soil was to be kept in a good state of cultivation.

The average owner's house was 20 by 20 feet and 1½ stories high. He also had double corn cribs, a stock barn, a smokehouse, a chicken house, and a springhouse where milk, butter, and other household foods were stored. A similar layout was provided for the tenant, but the buildings were generally smaller. As the owner's family increased, rooms were added to the side of the main building for use as kitchen and dining space, leaving the remainder of the dwelling for living and sleeping. Until the end of the Civil War, virtually all build-



ings were of log construction. Thereafter, because of better roads and facilities for hauling logs to sawmills, frame buildings were usually constructed.

*Economy of the Area.* The pioneer settlers considered the forest a liability rather than an asset. To them the thick stands of deciduous and coniferous trees meant long days of toil in removal and destruction. After using such material as they could for buildings, fences, fuel, furniture, and the like, they had very little use for the remainder. The chief thing was to get the soil to produce crops or furnish pasture as quickly as possible.

By the time markets began to develop toward the end of the Civil War and forest products assumed some degree of importance in the local economy, many of the Bent Creek landowners had used, wasted, or destroyed the greater portion of their best timber holdings. Rafting logs and lumber down the French Broad River for sale in Asheville, 10 miles distant, began in the late sixties. This provided farmers with needed income during the idle winter months. Trade in forest products was soon broadened to include posts, poles, fuel wood, shakes, shingles, charcoal, home-made furniture, and pine tar. Demand for these goods increased in direct proportion to the growth of Asheville, the leading metropolis of western North Carolina.

Land values in the Bent Creek region fluctuated widely in the nineteenth century. During the years 1820-24 the State of North Carolina charged 10 cents an acre; from 1838 to 1854 the price dropped to 5 cents but rose to 12½ cents an acre during the Civil War. Private sales, of course, were made at much higher figures. Thus, William Jones sold 200 acres to Henry Cagle in 1836 for \$240 or \$1.20 an acre. By the end of the Civil War, land values had advanced to around \$2 to \$3 an acre, and by 1900 to \$10 an acre, the average paid by Vanderbilt. In 1914 the Vanderbilt Estate conveyed all its Bent Creek holdings, along with other lands, to the Federal Government at an average rate of \$5 an acre, with the timber rights reserved. Bent Creek, however, was not logged.

*Farming Practices.* The agriculture practiced in Bent Creek usually followed the best pattern of the times. Land clearance was, of course, a prerequisite to cultivation. Where possible, the trees were deadened or girdled at least three years before the time planned for crop cultivation. This interval permitted the roots to rot, the bark

and small limbs to drop off, and the soil to "mellow up." After cultivating the soil for two or three additional years, most of the tree roots were so decayed that they gave way, allowing the trees to fall. When farm needs for wood had been met, the surplus logs were usually rolled into a clearing, piled in huge heaps, and burned. All this work was done with home-made implements such as mattocks, hoes, and axes.

After the trees were grubbed, rolled, and burned, the land was plowed with a home-made bull-tongued plow and planted to corn, wheat, or rye. At regular intervals during the summer, the ground between the corn rows was plowed and the corn itself cultivated with a crude hoe.

Most farmers practiced crop rotation, planting corn one year, wheat or rye the next, and allowing the field to lie fallow the third. The rotation was repeated beginning with the fourth year. Many farmers instinctively appreciated the value of soil conservation and erosion control. They plowed and cultivated on the contour, built check dams and piled brush in the gullies, and fashioned terraces or diversion ditches to carry water around valuable fields. There is only one known instance in the Bent Creek region of cultivating up and down the slope or at right angles to the contour. However, in a few spots erosion scars on abandoned old fields are still visible, indicating that not all farmers practiced crop rotation or gave heed to erosion control.

Stock raising had a very important place in the local economy, assuring the farmers not only a supply of meat but a small cash income that was badly needed to purchase goods not produced at home. The time, labor, and cost invested in stock were small compared to the returns.

Nearly every farmer, including tenants, tried to keep enough animals to furnish the meat needed for home consumption. The average family had 2 milch cows and 2 work horses or oxen, about 10 hogs, 20 sheep, 10 beef cattle, and a flock of poultry. Colonel L. M. Hatch, the largest landowner in the region, kept 100 to 150 goats between 1865 and 1895.

The entire county was considered open range. Crops were fenced and the stock turned out to graze wherever they could. Farmers generally drove their animals into the mountains in May and brought them home in October. The only care given range cattle or hogs was an occasional salting.

In 1885 a statute was passed by Buncombe County requiring stock to be confined on the owner's property. Henceforth every owner had to

provide a fenced pasture, either by building new fences and planting grass, or planting grass and using already-fenced fields. Winter feed, such as corn, oats, hay, straw, corn shucks, cane, beets, turnips, and pumpkins, was grown on the farm.

*Disposal of Farm Products.* The pioneer farmer was forced to grow as wide a variety of crops as possible if he expected to live in a style even approaching comfort. Subsistence production consequently was the dominant theme in the days when out-of-season crops could not be shipped in. Trade or barter with other farmers in the community was resorted to in order to add variety to the diet.

The major products of the region, in addition to cattle, hogs, sheep, and goats, were chickens, turkeys, geese, and ducks; bees; orchard crops such as apples, peaches, plums, pears, and grapes; and field crops such as corn, wheat, rye, buckwheat, oats, hay, stock beets, turnips, Irish potatoes, flax, cane, and broomcorn. Vegetable gardens supplied beans, beets, squash, pumpkins, cabbage, peas, onions, sweetpotatoes, mustard, lettuce, rhubarb, and fresh corn.

After reserving a sufficient quantity of each product to meet family needs until the new crop was produced, the surplus was disposed of in the neighborhood or sold in distant marts. As early as 1800, Kentucky and Tennessee stock raisers began to drive their hogs, horses, and cattle through Buncombe County to the markets of South Carolina and Georgia. Even turkeys were driven to market, the drivers using whips with pieces of red flannel tied to the end of the lash. The itinerant stock buyers paid an average of about 2 cents per pound for beef, \$1 to \$1.50 each for sheep, 2 to 3 cents a pound for hogs, \$10 to \$11 for milch cows, 30 cents each for turkeys, \$40 to \$50 for a good horse or mule, and \$30 to \$40 for a yoke of oxen. Chickens were often traded or bartered in the community. Five hens were considered fair pay for a man's full day of labor.

Before the Civil War, small groups of farmers used to make one or more trips annually to Charleston, South Carolina, or Augusta, Georgia, their wagons, drawn by one or two teams of horses, loaded with apples, pork, hog hams, beef, deer hams, butter, lard, eggs, chestnuts, chinquapins, honey, beeswax, dried fruit, whisky, and brandy. Returning, they brought an assortment of goods needed by the housewife or on the farm—salt, pins, needles and thread, farm tools, crockery, guns, ammunition, sugar, coffee, syrup, and cooking utensils. Many of these items were resold to

people in the community who had not made the long journey to Charleston or Augusta. After the Civil War when Asheville became an increasingly prominent market for Bent Creek's surplus products, the exhausting treks to South Carolina or Georgia were gradually abandoned.

*Manufacturing Enterprises.* The pioneers of Bent Creek displayed surprising ingenuity in building their crude manufacturing enterprises. With materials hewn from the forest and some brought in they were able to construct blacksmith shops, sawmills, planing machines, furniture factories, and gristmills.

As early as 1808 James Case built a gristmill, blacksmith shop, and sawmill. A large dam and millrace supplied water power for the flutter-type water wheel connected directly to a single shaft which furnished power for both grist and saw milling. The latter was of the up-and-down or sash type, operated by one man. It could cut 1,000 to 3,000 board feet of lumber a day. The Case mill was kept in operation until sold to Vanderbilt in 1905.

A similar enterprise was established by Wilson Boyd in 1820. It was purchased and expanded with larger and better machinery by Colonel Hatch in 1865. This operation produced wagons, tables, chairs, beds, and other furniture. Hatch kept 3 wagon teams busy hauling his manufactures to markets in Asheville, Georgia, and South Carolina, and returning with articles for sale in the general store which he kept.

There were other gristmills and blacksmith shops in Bent Creek, and between 1865 and 1875 a second chair and furniture factory was in operation. The blacksmiths were possibly the most essential artisans in the community, which depended upon them not only for shoeing horses but making wagons, plows, mattocks, axes, shovels, hoes, pitchforks, bolts, nails, and guns.

Manufacturing industries were not the only source of nonagricultural income to the community. During the winter, many men migrated to neighboring States to work on railroads and other construction projects. After the Civil War, short-time jobs opened up in Asheville. About this time Colonel Hatch, a native of Charleston, South Carolina, began his development program in Bent Creek, investing, it is said, a total of \$90,000 in various enterprises. To keep all his undertakings—which included a vast tract of land and many tenants in addition to his mills and furniture factory—in operation, he hired practically all the available labor in the vicinity. Not

a good business man, Hatch was almost bankrupt when he sold out to Vanderbilt in 1900.

*Community Life.* The life of a pioneer community like Bent Creek was not nearly as dour and monotonous as is often imagined. Many hardships had to be endured, of course, and without modern labor-saving machines work was arduous and back-breaking. But there was a spontaneous joy and inner harmony not often achieved in this bustling generation.

Self-reliance, hard work, and subsistence production were the keynotes of pioneer life. Virtually everything eaten by the family came from the farm. Home-grown flax and wool furnished cloth for clothes; hides from animals supplied leather for shoes and harness; and forest products the lumber for homes and furniture. Men had to be jacks-of-all-trades and women skillful in many arts.

For the average pioneer housewife, the day was never done. She rose, as one author has picturesquely noted, "Long before the pallid dawn came sifting in through chink and window..." Her first tasks were to kindle the fire, milk the cows, dress the children, and prepare breakfast. "That over and the dishes washed and put away, the spinning wheel, the loom or the reel were the next to have attention, meanwhile keeping a sharp look out for the children, hawks, keeping the chickens out of the garden, sweeping the floor, making the beds, churning, sewing, darning, washing, ironing, taking up the ashes, and making lye, watching for the bees to swarm, keeping the cat out of the milk pans, dosing the sick children, tying up the hurt fingers and toes, . . . making soap, robbing the bee hives, stringing beans, for winter use, working the garden, planting and tending a few hardy flowers in the front yard, . . . getting dinner, darning, patching, mending, milking again, reading the Bible, prayers, and so on from morning till night, and then all over again the next day."<sup>2</sup>

This arduous existence was punctuated with many festivities and much recreational activity. One or more community get-togethers were held each week of the year—shooting or wrestling matches, ball games, dances, logrollings, fence building, house raisings, quilting bees, or corn-shucking meets. Church and school work was not neglected.

Until the Civil War, the schools were known as "subscribed schools." They were held for two

or three months a year, in whatever private homes were available. The teacher received free board and a small salary. Since his board was part pay, he had to divide his time between the homes of his pupils. When Colonel Hatch moved to Bent Creek, he built a combined church and school where his daughter taught. The first county-supported school was opened in 1880. It operated for 3 months a year under the direction of a single teacher who taught the three r's and spelling. "There were but few books, and spelling was usually taught and learned by a sort of chant or sing-song, in which all, teacher and scholars, joined. . . children often learned to spell who did not readily distinguish the letters of the alphabet. These were often chalked or written with charcoal on boards against the walls."<sup>3</sup>

Before the building of Colonel Hatch's church, services were held in private homes. Later, the schoolhouse served as a church. The majority of Bent Creek folk were Baptists, but if possible they attended all religious services held in the community. In late summer or early autumn, there was usually a two weeks' revival for which everybody put aside his farm chores.

Square dancing was a prized form of entertainment, held weekly throughout the year, and virtually every night during the Christmas and Thanksgiving seasons. Drinking was not allowed at the dances, though it was customary at baseball games, shooting and wrestling matches, and other outdoor sports which were generally shunned by the women because of the rough talk and frequent fist fights.

Public works were generally communal affairs open to both sexes. While the men rolled logs or built fences, barns, or other structures, the women were busy quilting, making preserves, etc. It was customary for a family to put their own work aside and help their neighbors when invited to these public workings. The sponsor always furnished refreshments and prepared a big dinner.

After the corn had been gathered and stored, neighbors were invited for a corn shucking and quilting contest, usually followed by a square dance. To make the occasion more exciting, two men were selected as captains to divide the corn pile and choose sides. It was customary for the captains to wrestle in the shuck pile, with each side cheering its respective leader and everybody thoroughly enjoying the fun.

<sup>2</sup> Arthur, *Western North Carolina*, 256-257.

<sup>3</sup> *Ibid.*, 423.



*Direct Influence of Settlement on the Forest.* The settlement of Bent Creek materially altered the composition and form of the forest. About 90 of the homes built in the valley were of log construction; the rest of frame. The wall logs were hewn flat on two sides; the sleepers, joists and horizontal logs on which the shakes were fastened were hewn flat on one side only. Logs for flooring were split open and smoothed to a flat surface on the split side before being notched on the round side and laid in place. About 9,200 board feet of logs was required for the construction of the average house; the same amount for the barn; 7,000 board feet for the double corn cribs; and 800 board feet each for the smokehouse, chicken house, and springhouse. Altogether, the average homestead used 27,800 board feet of timber, and about 75 percent of this amount came from the cleared land.

The average family also used about 15 cords of fuel wood a year, of which 75 percent was salvaged from cleared land, cull and undersized trees, and the rest taken from the forest, much of it being green material. Timber for re-roofing and other maintenance work was usually obtained from uncleared land.

Since most of the land was cleared while the area was open range, it was necessary to build a split-rail fence around every tract. The larger fields were crisscrossed by fences which confined work stock and milch cows to land not in cultivation. The average fenced field was about 15 acres. The 1,472 acres of cleared land in Bent Creek were thus divided into about 90 fenced fields, each requiring  $\frac{1}{2}$  mile of fence. Each span of constructed fence took 10 split rails and a stake at the corner to lock and hold the rails in place. Altogether, about 4,500 cords of material were required for fencing purposes.

The 1,472 acres of cleared land was on the best timber-producing sites, representing an average stand of 8,000 board feet per acre or a total cut of 11,776,000 board feet of merchantable timber for farm purposes during the period of settlement. It is estimated that approximately one-fourth of this volume was burned during public log-rollings.

After the Civil War, the sale of products from the Bent Creek forested lands increased steadily until by 1900 about 1,000 cords of fuel wood, 200 cords of chestnut wood, 1,000 fence posts, 100 large gate posts, 300 light and telephone poles, 100 gallons of pine tar, 30,000 bushels of charcoal, 300,000 shingles and shakes, and 300,000 board

feet of sawed lumber were disposed of annually outside the community, mostly in Asheville. The bulk of this material came from the 4,830 acres of forested or uncleared land. Altogether, it is estimated that an average of 183,000 board feet (log scale) was drained annually from the forest between 1800 and 1900. This, however, was equal to less than half the annual increment.

*Indirect Influence of Settlement on Forest Conditions.* The advent of the white man had considerable indirect influence on the forest, much of which we can only guess. The settlers followed the Indian custom of woods burning. The red man used this device to improve hunting conditions. The pioneers burned the woods every year to improve grazing, destroy insects and snakes, and keep the forest open for the hunter. Some woods burning was due solely to a childish enjoyment of the spectacle. Burning was usually done in winter, when a minimum of damage occurred. The settlers raked around their fences and let the remainder of the woodland burn uncontrolled.

This chronic habit of woods burning was hard to destroy. When Vanderbilt took possession in 1900, he tried to prevent forest burning but without much success. Some of the settlers fired the woods for spite, because of real or imagined grievances against him. Others burned the forest so as to create fire-fighting jobs for local people. After the Forest Service took possession of Bent Creek in 1914, there were only occasional fires, burning over about half an acre at a time. The last serious conflagration occurred in 1925.

The recurrent burnings during settlement resulted in considerable damage to growing timber, evident in the butt scars on many trees, and in the loss of a portion of the natural reproduction that is responsible for the understocking of many stands. Burning may also have depleted the humus in the soil and was thus the indirect cause of considerable erosion.

Until 1885, Bent Creek woods were extensively grazed by cattle, sheep, goats, and hogs. After the fenced-range law was passed, stock raising declined. Only those farmers who owned fenced land or could afford to fence continued to keep stock. The consequence of intensive grazing was an open stand in the forest's understory with an overmature overstory. Much of the reproduction that would have replaced the dying trees was destroyed by grazing animals, who were also responsible for injuries to tree roots and for some erosion.



Erosion and the alteration of the forest floor probably helped to induce floods on Bent Creek, although only two of consequence occurred. The first was in June 1870 and the second in August 1940. During the latter, Bent Creek burst its banks for its entire length, flooding the lowlands, and washing out roads in many places.

In some abandoned fields there are still signs of sheet and gully erosion, much of it caused by improper cultivation, but some is undoubtedly the indirect result of intensive grazing and annual woods burning. Burning reduced the water-holding capacity of the forest soil, while grazing destroyed vegetation and broke the soil, thus inviting erosion. Although there is little actual erosion in the woodlands, there is much evidence of severe erosion in the fields, due to excessive runoff from the wooded areas above.

*Creation of the Bent Creek Experimental Forest.* George W. Vanderbilt purchased all but seven small tracts of the land in Bent Creek between 1900 and 1909. Many of the settlers were eager to sell, believing that Vanderbilt was offering more for the property than it was worth and that the money could be used to purchase better farms in other localities. A few families had the gypsy spirit and welcomed the opportunity to sell and move to new homes. Some owners, it was alleged, were tricked into selling by Vanderbilt's agent, who bought options on several farms and then let them lapse. Later, when he came back, most of those approached eagerly sold a second option, expecting to pick up more easy money. This time Vanderbilt forced the owners to sell, as specified in the contracts. Only seven settlers held out.

Four of these holdings were condemned by the Federal Government between 1922 and 1924, while the remaining three tracts are still under private ownership. Some of the farmers declared that Vanderbilt promised to let them remain on their land as long as they wished, but they were forced out as soon as the sale had been completed.

The Bent Creek area was included in the lands conveyed by Mrs. Vanderbilt to the Federal Government. The Pisgah National Forest controlled and administered the area from 1914 to 1925, when the northeastern portion, embracing about 1,100 acres, was transferred to the Appalachian Forest Experiment Station for the establishment of the Bent Creek Experimental Forest. This area was subsequently increased to 6,302 acres, devoted exclusively to research and experimentation.

The entire Bent Creek area is forested at the present time. The 1,472 acres originally cleared for cultivation have reseeded to pine and yellow poplar, and many of these old fields bear some of the finest young stands—particularly of the latter species—that can be found on the experimental forest. One such cove, last cultivated in 1905, now supports nearly 20,000 board feet per acre.

About 80 percent of the forest is composed of mixed hardwood types. The rest is in shortleaf, pitch, and Virginia pine. Except for the pure stands of pine and yellow poplar, and the chestnut, which was killed by a disastrous blight, the present stands are of the same composition as those found by the first settlers who trudged up the mountains to lay out sites for future homes and farms.

## NEWS NOTES AND COMMENTS

### ARABIAN MANUSCRIPT ON AGRICULTURE

Max Meyerhof's article entitled "Sur un traité d'agriculture composé par un sultan yéménite du xiv<sup>ème</sup> siècle" in the Institut d'Egypte, *Bulletin*, 25 (1942-43): 55-63, 26 (1943-44): 51-65, is both a resume and a promise. It is the resume of an Arabian manuscript by al-Malik al-Afdal al-Abbas ibn Ali, Sultan of Yemen from 1363 to 1376, now in the Royal Library of Cairo. It is the quasi-promise of the publication of the text with translation and commentaries as soon as circumstances permit.

The Arabian title may be translated as "The Object of the Desires of Agriculturists with Regard to Fruit Trees and Odoriferous Plants." The book contains 16 chapters. It is especially concerned with arbori-

culture but does not limit itself solely to fruit trees and fragrant plants. After some theoretical discussion of the classification of plants (in terms of trunk, branches, seed, roots) of no interest here, there appear some curious observations on the effect a change of habitat produces on plants (oranges, couch-grass, sugarcane, etc.) and some remarks on the sexuality of plants apropos of the date palm.

Here is the plan of the work: 1, The different soils; 2, Manures and ways of preparing them; 3, Waters; 4, The selection of soils and their improvement; 5, The seasons suitable for sowing and reaping; 6-11, Useful plants (116 in all), including grains and legumes, green vegetables, spices and condiments, fragrant plants, and fruit trees, together with advice on the selection of soils and the methods of irrigating them,

and on sowing, cutting, manuring, and pruning; 12, The pruning of trees (very short); 13, Grafting; 14, Some special properties of plants (very disorganized); 15, Recipes against insects (lice, ants), storms, hail, lightning, and birds; and 16, Medicinal plants (130), weights and measures of Yemen, and houses.

Although this summary makes the arrangement more systematic than it really is, the work presents a thousand important pieces of information on the modes of cultivation and irrigation practiced in Yemen in the Middle Ages.—G. Debiën; translation from the French by Helen L. Eddy.

#### BRAND'S BOOK ON THE ECONOMIC SYSTEMS

The president of the Agricultural History Society, Charles J. Brand, has recently published a timely volume entitled *What Economic System for America?* It brings together a wide range of information with a view to helping Americans reach intelligent conclusions with reference to some of the crucial postwar economic problems. As the author's life has been devoted to the service of agriculture, the book is written primarily from an agricultural viewpoint.

The principal economic and social systems prevalent since World War I are delineated. Although fascism and national socialism are discussed, the major attention is given to a comparison of American free enterprise and individual initiative with communism as it has evolved in Russia since 1917. The conclusion is that the American system has evolved "from our own particular history, population, natural resources, and form of government, and almost inevitably is best fitted to our needs. Its alteration should be vigorously opposed. Any needed improvements should come through constitutional and lawful means."

The book is published by the author, Investment Building, Washington 5, D. C.

#### FURTHER COMMENTS ON THE OBJECTIVES

In a letter dated December 3, 1945, Warren C. Waite of the University of Minnesota made the following comments on the outline of objectives for the Agricultural History Society that appeared in *Agricultural History*, 18:187-192 (October 1944).

"In the series of monographs which you suggest . . . it seems to me that some investigation of the possibilities of a series on the leading farm organizations and principal cooperatives might be a feasible starting point. If properly approached, it might be entirely possible that organizations such as the National Grange or the Dairymen's League would lend financial support to publication of well written histories of their organizations. I would think they might make a grant of funds to an organization such as the Agricultural History Society, permitting the Society to select and commission an authority in the history field to undertake such a study. . . . If a good series could get off to a start without financial difficulties, it would have a considerable

possibility of maintaining itself later without too much outside assistance. . . ."

#### AGRICULTURAL EXTENSION

Sixteen distinguished social scientists have contributed to the volume entitled *Farmers of the World: The Development of Agricultural Extension* (New York, Columbia University Press, 1945, 208 p.) and edited by Edmund deS. Brunner, Irwin T. Sanders, and Douglas Ensminger. The primary aim is the delineation of extension as the most effective general approach which a government or a private agency can use in helping rural people solve their problems. The ways and means of extension are considered in detail, but the main emphasis is on extension as an instrumentality for furthering democracy.

Having defined extension very broadly in an introductory chapter, the subject is developed in three parts devoted to nonliterate societies, peasant societies, and Euro-American society. There are chapters on extension work in the Pacific Islands, China, India, Arab Fellahin (Egypt, Palestine, Transjordan, Lebanon, Syria, and Iraq), the Balkans, Latin America, the United Kingdom, Northwest Europe (France, Belgium, the Netherlands, Denmark, Germany, and Switzerland), and the United States. For each country or region, attention is given to the cultural background against which extension work is conducted and ways by which desirable innovations can be made a part of the ways of life.

#### BAILEY'S BIOGRAPHY OF KNAPP

In a real sense Joseph Cannon Bailey's *Seaman A. Knapp: Schoolmaster of American Agriculture* (Columbia University Studies in the History of American Agriculture No. 10, New York, Columbia University Press, 1945, 307 p.) is a biography of the origin and development of the basic concept underlying the county farm and home demonstration system to 1914 when it was nationalized by the Smith-Lever Act into the Extension Service of the United States. Knapp was seventy years old when he began to organize the system and demonstrate its values, and a surprising feature of this study is the clear indication that the ideas and experiences incident to the demonstration concept were the product of the many seemingly unassociated occupations in which Knapp had been previously engaged.

The county farm and home demonstration system has become the most widespread and successful institution for adult and extramural education ever undertaken and has a significance that few Americans will realize until they have read this monograph. The story of Knapp's versatile career in diverse settings is of unusual interest for itself, but the importance of his main contribution plus the highly commendable manner of execution make this volume an outstanding contribution to agricultural history.